AGRICULTURAL

MARKETING IN INDIA

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PREFACE.

It has at last been realised that the amelioration of the economic condition of our agriculturists depends to a large extent on the improvement of our marketing organisation but very little detailed information is available about the conditions under which agricultural produce is marketed in different parts of India. An attempt has been made in this book to offer a comprehensive study of the different links of our marketing chain based on five years' personal investigations in the principal marketing centres of India. Suggestions have been given for the improvement of our marketing system.

It has not been possible to include the marketing of milk and other dairy produce in this volume as it requires a fuller treatment.

The author is grateful to all those businessmen and Market Organisations in different parts of India who have given him the necessary facilities for his investigations. He acknowledges the help he has received in preparing the typescript from his sons Sunil and Subhas.

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30*th April* 1937.

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INTRODUCTION.

"The agriculturist throughout the world tends to seek security rather than riches. Though the peasant's life, judged by many standards, may be a hard one, life on the land offers amenities which no city life can give. The draw-backs of rural existence diminish every day; its advantages remain. But the main economic attraction has been the sense of stability."* In recent years however as a result of the combination of a number of factors that stability has been threatened and no efforts should be spared to rescue agriculture from its present plight. Agricultural development has a close connection with the industrial and commercial activities of the rest of the world and the instability from which agriculture is suffering at the present moment is only a phase of the malady which has affected the economic systems of all civilised countries. Thus agricultural improvement can only be secured by international action aimed at the solution of the basic deficiencies of our present economic organisation but this must be preceded in every country by a close and searching study and analysis of all the processes connected with agriculture with a view to rationalise it.

Uptill recent years more attention was paid to agricultural production than to marketing in India. The growing of two blades of wheat in place of one appeared to be more important till the catastrophic fall in world prices made the extra blade of wheat more a handicap than a blessing and as a result of this the attention of the country has been focussed on the marketing aspect as well. Three parties are mainly interested in marketing—the grower of the commodity, the middleman and the ultimate consumer but the most important of these parties is the consumer as all production has consumption for its objective. Though at the end, the consumer plays an important part in determining the volume and nature of production and in fixing

* World Agriculture--An International Survey p.247.

the price level, the farmer does not realise this as he has no direct touch with the consumer. "If the Iowa farmer puts a bad egg in the egg case, he does not see the expression on the face of the New York or Boston housewife when this bad egg is opened. Her retail grocer hears her comment over the telephone."*

Agricultural production is carried on under varying conditions by people who own small plots and work on a small scale. They are busy in the production of a few crops and have neither the time nor the ability for studying the markets or for marketing their produce at advantage. Their lack of credit facilities is also another handicap and as a result of all these is developed a class of independent local middlemen whose function is to collect the small surpluses of the individual farmers in the primary market and despatch them to the bigger market which acts as a reservoir to which the produce comes in from all sources, at all seasons and of wide variations in quantity and quality." By releasing the supply so that there can be an adequate flow to users, by keeping the markets in balance through interchange of information and by directing commodities to those localities where demand is the greatest; in short by adjusting a fluctuating supply to a constantly changing demand, these wholesale markets perform an indispensable equalising process.'† In the next stage begins the process of dispersion under which the produce is arranged for supply in adequate quantities for the manufacturers or for consumption in smaller lots by the concentrated population in urban areas. Manufacture is usually localised near the source of the raw material and this simplifies the process of dispersion. In the sugar producing provinces of India owing to proximity of the sugarcane area to the Mills, the chain of middlemen is not long but where with the improvement in the means of communications, decentralisation in production has taken place e.g., Cotton industry in India, the process of dispersion is apt to become more complicated.

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* Boyle—Marketing of Agricultural Products p.4.

† Clark and Weld—Marketing of Agricultural Products p.13.

Thus the marketing functions include primarily the assembling of the produce. The difficulties of this are very great as there is a wide variation in the qualities of a particular produce from season to season and from farm to farm. The commodities have to be marketed in large quantities so as to secure economy in transport while at the same time the supply has to be adjusted to the customer's demand for variety. Adequate facilities have to provided for the storage of the assembled produce and during the period of the storage and before it also financial assistance is a necessity. Those who acquire ownership of the produce during the marketing process have to assume risks of various kinds which include risk of loss due to fall in price, danger of deterioration in quality or of total destruction of the produce. Before the actual sale takes place, the produce has to be standardised and graded. Transportation is the last process in this chain and often the success of the marketing function very largely depends on the cost and facilities of transport.

Agricultural marketing has certain pecularities of its own as the characteristics of agricultural produce largely affect their marketing. The bulk of the produce is considerable in relation to its value and this makes its transportation and storage difficult and costly. The crops mature during a short period and there is a glut in the market immediately after the harvest depressing prices and putting a tremendous strain on the means of transport. It is well-known that in the sugarcane region in Bihar the crushing season being a short one, there is a heavy congestion in the rail and road traffic. The same is true in the case of fruits like lichis and mangoes. This accumulation complicates the problem of securing storage facilities in central markets. There is a wide variation in the perishability of different agricultural products or of the same product under a diversity of physical conditions, and this has its correspondin effect on marketing. Grain or cotton can be kept for long periods but the wastage in the storage of potatoes is very high. The variations in the quality and the volume of agricultural produce are so wide and estimates of the surplus available for marketing are so difficult to prepare due to

the interplay of a number of factors that the market is very often disorganised and storage rendered difficult. This surplus may be caused by overproduction as the result of a very large increase in the acreage over a number of years, as the following figures about the acreage under Jute in India will indicate:—

	(000 acres)
1922	1,446
1924	2,738
1926	3,610
1928	3,062
1930	3,402

Weather factors to a certain extent also affect the marketable surplus, as favourable weather conditions in anyone year or in several consecutive years may secure, for the same acreage, a greater yield and production above the normal. Weather factors also affect acreage to some extent, e.g., winter sowings are considerably influenced by the monsoon. Besides these, surplus may be caused by the fact that "yields change over a period because of improvement in varieties and cultural practice and because of the shifting of production to other areas either better or less well adapted to the crop."*

There is no doubt that the elasticity of the demand for the non-staple foodstuffs is very great but it is wrong to assume that the demand for the staples has no elasticity. On the other hand with the development in the science of Dietetics systematic attempts are being made in the various countries to improve the nature and the qualities of the food consumed. "In the United States the changes in the diet are very marked since the war. There is a decrease in the consumption of cereal foods; sugar shows an increase of 27 lbs. per head per year; there is a great increase in the consumption of milkand milk products which sent up the production of milk in the United States by 50 per cent

* Black—Agricultural Reform in the United States p.86,

between 1915 and 1928."† In Northern India inferior grades of grain like Jowar, and Bajra are being displaced from the dietary by rice and wheat. In Germany there is a market increase in the consumption of the vegetables and fruits. Small increases in the per capita consumption effected as the result of the "Eat more wheat" or "Drink more Milk" campaigns in various countries are being reflected in the rise in the total demand in various countries. In England the demand for margarine is showing a tendency to decline as in the recent years the consumption of butter has gone up by 30 per cent, partly at the cost of margarine."††

In India too, even with a very low standard of consumption, changes in demand have taken place in recent years. In an enquiry into the rates of food consumption among the tenant cultivators in the Khanewal Tahsil of the Multan District, it was found that "in the days when the tract was unirrigated the Jangli population largely subsisted on meat, milk, Ghee and the cheaper kinds of grain, such as maize, bajra, jowar, Moth and also some rice; they have now become wheateaters and that grain now forms their staple food."* Elsewhere in the Punjab the same tendency is noticeable. "In the first place barley has been replaced by wheat or a mixture of wheat and barley. Secondly inferior crops are neither grown nor consumed. Thirdly the principal vegetable named Kachalu (Arum) is now giving place to potatoes. Fourthly consumption of fish and meat has decreased on account of licensing restrictions."*

In some cases there are seasonal variations in the demand due to occasional substitution of other varieties of food which are cheaper. In the District of Muzaffarpur dates form the major diet in the season between June and August and the rate of cereal consumption goes down very much during this period from 26.25 seers per month per

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† Baker—"Population and Land Utilisation" in Procedings of the Second International Conference of Agricultural Economists" Wiscnsin 1930.

†† Empire Marketing Board, Dairy Produce Supplies in 1931.

* Report on the Survey of Haripur and Mangarh Taluquas of Kangra District by Bhai Mulraj pp. 120,

adult among petty owners in the April-May months to 8.75 seers and the former rate is again reached in September.†

It has been suggested that the change in dietary is not only as the result of the attempt of all communities to improve their standard of living but is caused by the changing physiological needs due to altered conditions of labour. The increasing use of machinery has brought about a reduction of heavy manual labour "and this reduction carries with it a change in the kind of food required. The manual labourer takes more carbohydrates, the sedentary worker more concentrated food. A manual worker engaged in some types of farm labour might easily need food providing 5,000 calories per diem; riding on a machine the physical demand of the same man might be 3,500."†† Thus with changes in the condition of labour, and standard of living and with the substitution of one variety of food for another a great amount of elasticity is introduced in the demand, which the producer and the middlemen have to take notice of in adjusting supply to demand.

A study of the marketing agricultural produce in India should begin with a brief description of the agricultural position. Over the greater part of India there are two well defined seasons, the rainy and the winter, yielding two harvests, the Kharif or autumn including Rice, Juar, Bajra, Cotton and Jute and the Rabi or Spring including wheat, gram, linseed, barley, etc. In the southern portion of the Deccan tableland however the distinction between these two seasons is not well marked. The tables will indicate (1) the distribution of the crops in different Provinces and (2) the changes which have taken place in the acreages under the different crops between 1920 and 1930 and (3) the volume of agricultural production.

† Economic Survey of Bhambu Sandila by A. R. Khan 1935.
†† World Agriculture—An International Survey p. 19.

TABLE I.

Area under Principal crops cultivated in 1932-33 *in each Province*

(Thousands acres) (Food grains)

Province	Rice	Wheat	Barley	Jowar	Maize	Tobacco	Bajra
Assam	4,870	X	X	X	X	13	X
Bengal	21,771	142	85	6	76	281	3
Bihar & Orissa	13,072	1,234	1,525	84	1,820	161	72
Bombay	3,135	2,627	33	8,211	178	136	5,113
C. P.	5,595	3,450	12	4,251	158	92	112
Madras	11,533	14	2	4,534	201	256	2,817
Punjab	878	8,590	617	1,112	1,034	66	3,402
U. P.	6,262	7,816	3,931	2,380	2,146	84	2,184
N.W.F.P.	37	1,012	137	116	207	8	207

TABLE III. (Acreage)

Province	Linseed	Sesameem	Groundnut	Sugarcane	Cotton	Jute
Assam	2	21	X	32	36	127
Bengal	124	160	X	233	58	1,611
Bihar & Orissa	640	200	1	301	65	134
Bombay	125	255	1,194	74	4,222	X
C. P.	1,008	604	185	27	4,000	X
Madras	2	835	3,516	120	1,949	X
Panjab	27	136	X	558	1,889	X
U. P.	227	387	47	1,773	515	3
N W.F.P.	X	2	X	53	16	X

TABLE II. (Thousands of acres)

Estimate of Agricultural Production 1933-34

(Thousands omitted) (British India)

	Tons.	
Rice	29,958	
Wheat	7,576	
Sugarcane (Gur) ..	4,450	
Linseed	369	
Rape and Mustard ..	1,029	
Groundnut	2,514	
Cotton	2,950	Bales of 400 lbs. each
Jute	7,941	Bales of 400 lbs. each

TABLE III.

	1920	1930
	1920	1930
Rice	78,120	80,632
Wheat	20,368	24,797
Barley	6,268	6,693
Juar	22,690	22,808
Bajra	12,002	13,698
Gram	9,464	13,644
Maize	6,206	6,458
Linseed	1,469	1,999
Sesameem	3,592	3,638
Rape and Mustard .	2,979	3,297
Groundnut .	2,706	2,869
Cotton	14,114	14,201
Jute	2,473	3,402
Tobacco ..	932	1,112

Where such extensive acreages are concerned the difficulties in marketing are apt to be very great indeed and these are heightened by the fact that communications are very often undeveloped and the conditions under which production is carried on are so uneconomic. The small farmer cultivating his fragmented holdings, and lacking in capital and combination falls an easy prey to unfavourable climatic conditions. "His farming is still largely of the subsistence type. His sales of produce are intermittent. His day to day concern is with production and upon this his attention must in the main be fixed. The traditional lore and inherited experience of his craft centre round the work on his holding: they are for the most part lacking in the commercial side of his business. Until therefore, he realises that, as a seller of produce he must study the art of sale, either as an individual or through combination with other producers, it is inevitable that he should come off second best in his contest with the highly specialised knowledge and the vastly superior resources of those who purchase his produce."* The middlemen, therefore, under the present circumstances is performing a distinctly necessary function and marketing reform in India should aim at the organisation of the producers so as to secure for them better bargaining power and the creation of the most favourable conditions for the free play of the forces of demand and supply.

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* Report of the Royal Commission on Indian Agriculture p.382.

CHAPTER II.

THE MIDDLEMAN.

"The two biggest losses which the farmer sustains," according to Jardine the U. S. A. Secretary of Agriculture, "are in uneconomic production and uneconomic marketing." With an increase in size and a rise in the scale of industry, the gap which separates the producer and the consumer is rapidly becoming wider, bringing in a chain of middlemen entrusted with the duty of rendering services for which payment has to be made. In India the weaver or farmer of the 17th Century producing for the consumer in the village and getting his remuneration in kind has now been replaced by mass production for far distant markets and for a demand the volume of which is not always capable of accurate measurement. The devlopment of science which has led to the proper preservation of food and its storage has extended the time factor in the market, so that it is now possible for the Australian stock grower to supply to the distant European market or for the Californian orange grower and the Indian jute cultivator to exchange products. As a natural corollary to this, transportation has assumed greater importance and the services required to make the commodities transportable have become no less important.

The consumer gradually has grown to accept every new facility created and every new service rendered as a matter of course and the demand has been for more, e.g., the consumer of tea was accustomed to his supply in bulk from the grocer, then tin and paper packets were introduced and now he prefers home delivery. With every facility created and every convenience added more people are being drawn into the distribution business and in addition to the work of passing on the commodity from the producer to the consumer, industries engaged in making the produce portable and presentable have sprung up, and all these mean addition to the cost which the consumer has to pay with

the result that values of commodities are swallowed up by the costs of other services.

Machine production is rapidly lowering the cost of production by increasing the size of the industry, by a progressive development of machine power and efficiency and by the introduction of labour saving appliances. In the iron and steel industry a magnetic crane operated by two men has replaced as many as 128 men and in the boot industry one man working on a lasting machine has replaced 12 hands. In agriculture, particularly in countries where machinery is largely employed as in the U.S.A., the output per worker has during the first quarter of this century increased in wheat by 41.8 per cent and in corn by 46.7 per cent while in rice it has risen by 4½ times, in cotton by 3 times and in sugar beet by 7½ times.* In Indian agriculture too the cost of production is gradually going down due to the introduction of better varieties of seeds, better irrigation facilities and improved implements, but the farmer even after succeeding in growing the proverbial two blades of grass in place of one, finds himself worse off than before as cheap production has been followed by a lengthening of the chain of middlemen resulting in more costly distribution. In the primary jute markets in Eastern Bengal the grower has to give 2.7 to 4 maunds extra per 100 maunds sold to the middleman. In the Yeotmal Cotton market, the middleman's charges are Rs. 2/3 per khandi of cotton while the same for Pusad a smaller market is Rs. 1/1. In the Anantpur District of the Madras Presidency, according to the specimen figures submitted to the Madras Provincial Banking Enquiry Committee, for a consignment of 21 maunds of Groundnuts sold by the grower he received Rs. 91 and the middleman charged Rs. 3/12 while for a lot of 158 maunds of Jaggery valued at Rs. 516 the middleman's charges amounted to 4 per cent. The jute grower in the Rangpur District of Bengal gets on an average Rs. 6/8 out of a bundle of Rs. 10 worth of his jute sold in Calcutta. In the Surat District of Bombay the difference in the prices obtained by the rice grower and the ultimate consumer is

*J. H. Barnes—America's Industrial Production Methods (American Economic Review Suplement, March 1924).

often as high as 150 per cent. From the statement of a sale transaction of 150 maunds of Gur given by G. C. Mukhtyar* we find that the producer received only Rs. 3/15 per maund while the consumer paid Rs. 6, thus the difference (52 per cent) represented the middlemen's charges and this margin in not immaterial when we realise that the farmer in that area lives on the margin of subsistence. In the marketing of fruits in the Bombay Presidency cost of transport and middleman's profits take up a large share of the difference between the price paid to the grower and the sale price in the Bombay Wholesale Market, as will appear from the following figures.

Place.	Fruit.	Percentage of Sale proceeds received by Producer.	by Middleman.
Poona	Guava	33.6.	66.4.
Poona	Orange	53.4.	46.6.
Nagar	Mosambi	28.6.	71.4.
Nasik	Papya	36.9.	63.1.

When we consider the retail side of distribution in the fruit trade, the postion of the grower recedes far in to the background. The Report of the Committee on the Improvement in the Marketing of Fruits and Vegetables in the Town of Bombay (1934) gives an illustration of the wide margin between the producers' prices and retail prices paid by the consumer. A Poona guava grower sent a basket for sale to Bombay and it was sold it to the retailer for Rs. 4/3 and the latter sorted the fruits into four classes and fixed differential prices for each grade, so that the total expected price was Rs. 19/4 but as about 50 percent of the fruits was not sold or damaged, he received actually Rs. 9/10. Thus the difference in the two prices was Rs. 6/10 on this consignment and on analysis we find that the grower received 11.6 percent, cost of packing accounted for 2.3, freight 9.7, other transportation charges 7.6, wholesaler's profit 12.3 and retailer's profit 56.5. A statistical comparision of the

*G. C. Mukhtyar—Life and Labour in a South Gujrat Village (1930),

actual gains of the producer by selling through the ordinary middlemen and through the cooperative sale organisations is not always possible as the middlemen in India, particularly in the early stages have earned a wide notoriety for their incorrect weights and bad system of accounting. In the marketing of fresh coconuts we find that," even though the prices are generally quoted per 1,000, the ryots have to give more than 1,000 nuts to the dealer or the up country merchant."* From the figures published by the Sub-committee of the Indian Cotton Committee in their Report on an enquiry into the marketing of cotton in Adoni and Nandyal Taluks of the Bellary and Kurnool Districts of the Madras Presidency, we find that by selling 21 maunds of groundnut and 20 maunds of jaggery through a broker, a grower received Rs. 91 and paid Rs. 3/12/6 as middleman's charges while by sale through a cooperative loan and sale society he received Rs. 92 and paid Rs. 2/12/6 as marketing charges, a difference of Re. 1 but he was assured of correct weights, accuracy in accounts and financial assistance. In the case of marketing the produce direct, particularly in fruits and vegetables, the grower makes a big saving which makes farming remunerative for him. Some energetic fruitgrowers of Atgam in the Surat District do their own marketing themselves. They assemble, pack and despatch fruits to Bulsar, Surat or Baroda.** One such man was offered Rs. 275 by a middleman for his lot of mangoes, 5,791 in number, but he preferred to market them himself. His gross receipts were Rs. 612/14 and his marketing expenses amounted to Rs. 233/7. Thus his profits were Rs. 378/7 or Rs 103/7 more than what he would have received if he had marketed through middlemen.

To illustrate how middleman's charges are gradually piled up on the grower's prices, we may cite an instance of a transaction in cotton from Cawnpore. The village Bania paid the grower at the rate of Rs. 8 per maund and sold it in a large market at Rs. 9 per maund out of which he had to bear marketing costs of annas four per maund. Thus the grower received for 100 maunds of cotton Rs. 800 and the

*Report on the Enquiry into Cocoanut Trade in India 1934.

**Muktyar—Life & Labour in a South Gujrat Village p. 194.

ginner had to pay for it Rs. 1,036-5-0 or Rs. 236-5-0 more, and out of this Rs. 107-13-0 represented the cost of transport, packing, interest, and insurance etc. while the balance Rs. 128-8-0 or 16 per cent on the total grower's price are the actual profits of the middlemen. Tracing the gradual increase in the price in groundnuts in Madras in this way we find that when the village grower received Rs. 1-5-3 per maund, in the next stage the rate rose to Rs. 1-10-0 and at the exporting point Rs. 1-13-0 or 38 p.c. higher.

Evidently the middlemen's charges vary widely according to the nature of the commodity, the extent and complications in the marketing organisation, the difficulties or otherwise in the assembling and transport of the produce. The charges for the marketing of foodgrains are lower than those for commercial crops, e.g., the charge in the case of wheat in the United province from the village to the large market or to the railhead varies from 4 to 6 p.c. as the following illustration will show;—

Marketing charges on 100 maunds of wheat @ Rs. 5 per maund from village to Railhead in the Hardoi district.

Weighing, marketing dues etc. ..	8—12—9.
Charity	0—1—3.
Cleaning charges	6—4—0.
Broker	5—0—0.
Transport cost	9—6—0.
Total Rs.	29—8—0.

This works out to 6 p.c. while in Travancore, in the case of a parcel of copra, valued at Rs. 39-14-0 the charges were Rs. 4-2-0 or 10. p c In the Anantpur district of Madras, the marketing charges in groundnuts vary from 6 to 8 p.c. Jute and groundnuts are grown over a wide area in small plots, hence an army of middlemen is required to assemble and prepare them for export. It is quite natural to expect that in the case of such commodities as well as for Gur, the cost of marketing will be much higher than in others. In jute the middlemen charge 25 to 30 per cent of

the value as their remuneration.*1 In the Calcutta Jute market two systems of charges are in vogue, one among Bengali Aratdars and the other among non-Bengali merchants, the latter having a flat rate of six annas per maund for Katcha and seven annas for Pucca bales while the former have only the Pucca system and they charge four annas per maund in addition to a bewildering variety of charges under various pretexts.*2 In the Punjab too, the figures of the Shahpur village enquiry indicate that the village dealer's margin of profit is only two annas per maund for wheat and four to eight annas for cotton. The charges that have to be paid by sellers of grain vary from Rs. 2-2-3 at Gojra to Rs. 2-14-6 at Chicha and the charges for cotton at Lyallpur are Rs. 3-4-0 while the corresponding charges for grain there are only Rs. 2-5-6. Even in the primary markets, the charges vary according to the nature of the commodity. Tehong village in the Jullundhar District of the Punjab has two markets close to it. Phegwara, a small market is 10 miles away while the bigger market Ludhiana is at a distance of 12 miles and both are on a metalled road although the road connecting the village with the metalled road is not at all good. The charges for marketing at Phegwara Rs. 100 worth of produce are Rs. 1-9-0 for wheat and Rs. 1-5-0 for maize while they are Rs. 2-1-0 for cotton and Gur.†3

The number and variety of middlemen depend also to a large extent on the scale of agricultural development. In those districts of the United Provinces, where the Kharif harvest consists of the cheaper foodgrains, the quantity of crops available for marketing is small, hence the trade is mostly concentrated in village markets and the petty traders are numerous, but "in the western districts where irrigation is adequate and money crops are grown, the traders are wealthy and the markets though few are well organised. It is in these bigger mandis that the wholesale

*1. H. Sinha—Mofussil Marketing of Jute (Indian Journal of Economics, December 1929).

*2. Note on Marketing in villages—App 60 Punjab Banking Enquiry Report.

†3. Punjab village survey—Village Tehong, District Jullendhur Pf. 68.

Aratiya is found; the financier who, by lending capital to Beparis makes sure that the produce of the neighbourhood should reach him regularly at harvest time. He is the commission agent of the wholesale merchant and the Mill and the most important link in the chain of middlemen who unites the grower and the exporter.* In jute the great number and variety of middlemen is mainly due to the fact that the high value of the crop requires large funds and many middlemen for moving them. The special process of baling has given rise to another class of middlemen called the Baler and his agents. Besides these the transport difficulties are to some extent responsible for the lengthening of the chain. In Eastern Bengal the villages during the rainy season are completely cut off from the rest of the world and a Bepari requiring 500 maunds of jute has to go to the edge of a small paddy field in order to get 3 or 4 maunds from one village and then go to another village and buy another lot of 5 or 10 maunds, thus for every lot of a few maunds he has to go 3 or 4 miles. These dealers move about in their small boats and after making a substantial collection they ultimately go to a big village where the Bepari's boat is anchored.†

In the primary market, the grower either sells in the village or in the nearest market (Hat, Mandi or Shandy) himself or sells it to some middlemen belonging to the village or visiting it. The village middleman may be the moneylender carrying on trade as well or the small village grocer making purchases for sale in the nearest Mandi. In the United Provinces about 30 per cent of the wheat of the village is sold to the moneylender, 35 per cent to the small grocer, 5 per cent to the village Kumhar (potter) and 30 per cent is sold directly by the grower at the nearest Mandi. The village mahajan has priority over others as he is the financier of the cultivator and makes advances to him from season to season to secure the crop. He sometimes stores the produce in the expectation of a rise in the market but the grocer does not do so and he sells soon

*Report of the U. P. Banking Enquiry Committee.

†Evidence of Mr. G. Morgan before the Royal Commission on Agriculture.

after the purchase. He pays cash and the price is paid on delivery or immediately after sale on the next market day. He buys at the village rate and the weighing which is done under his supervision, gives him ample scope for cheating. His profits come to about Rs. 2/8 for a cartload of 16 maunds which amounts to 3½ per cent, a rate high enough in view of the fact that the turnover is rapid and the risks involved are negligible. In backward regions in Assam sometimes the Beparis take with them earthenware pots and exchange them for the quantity of paddy that a pot will hold.

The difficulties of transporting the produce to the nearest market for direct sale are to a large extent solved by middlemen of the class of village kumhars in the United Provinces who own pack animals and buy from the growers. They make good profits on the margin allowed by the village price, false weights and freight allowances. In the backwoods of Dindori in the Central Provinces a class of itinerant traders move about with their herds of pack bullocks carrying grain for sale in the wholesale market. In the United Provinces this function is performed by the Banjaras, a class of nomadic middlemen who buy grain in the villages in the Terai and Bhabai, give advances to the Tharu and Bhoksa ryots and keep a tight hold over them so as to secure favourable prices and exercise a close monopoly over this trade. In the Amritsar District, cotton is purchased by village traders called Khojas who own pony carts having a loading capacity of 16 maunds and the produce is carried to the Amritsar market. These village buyers are very useful to the petty ryots who do not own carts and have very little surplus to sell at one time or who have to supplement their meagre income from land by working as labourers and have no leisure to go to the market with their produce, but this service is obtained at rather high cost. In such cases, sometimes the village watchman or Taula acts as a part-time middleman. In United Provinces, in some areas in addition to his normal function of weighing wheat sold in the village, the Taula takes samples weighing one chatak (1/16th of a seer) of each lot to the nearest Mandi and after obtaining orders returns

to the village and arranges for the delivery of the produce to the middlemen in the Mandi. He realises his commission and other charges from the grower. Even where the activities of the Taula are confined to his normal function of weighing, he exercises a great influence on the ryot in determining the prices and the persons to whom the produce is to be sold. In the mango trade in the Bombay Presidency, the Hundekari or the transport agent plays an important part in deciding as to which of the Bombay brokers the consignment is to be sent. His normal function is to take charge of the parcels from the grower at the railway stations in the rural areas, to weigh and label them, arrange for their loading in the waggons and make over the railway receipt to the grower or what is more common to the Bombay consignee direct. He gets his commission from both the parties and plays a great part in determining the direction of trade.

Besides these in many areas the tendency is for a more prosperous ryot to buy up produce from the poorer ones and start as a middleman. This has been promoted by the increasing competition among merchants which has reversed the practice of the growers going in search of buyers. In the tobacco trade in North Bihar, a few of the villagers buy up the standing crop from the other growers who mainly cultivate it in small patches, and pay a small sum as earnest money, after which they reap the crop and rough cure it and sell the collected produce to outside Beparis when they visit the village. In some areas like Nowgong in Assam, the Pradhans or Sarkars (headman) of villages exercise great power over the smaller ryots whether they are indebted to them or not. Jute and paddy in this region have to be marketed through them often at rates not favourable to the growers.

In addition to all these, the Faria, Bepari or Paikar plays an important part in moving the produce from the village. The Faria is usually a man of the locality and he goes about collecting small lots from the villages and supplies to the Bepari who is above him in the chain. In some cases the Faria purchases on his own account and

sells to the Bepari at current market rates, thus undertaking all the risks of the business himself, but usually he works as an agent of the Bepari and buys with his own money, being entitled to a commission only. During the sowing season in the Jute areas of Bengal, the Bepari directly or through the Faria advances money to the Ryots on hypothecation of the crop on *Satta patas* by which the borrower agrees to deliver a stipulated quantity of Jute to the lender within a specified date in repayment of the loan. The Faria transports the Jute to Jute collecting stations or mokams for delivery through the Bepari to the balers or exporting houses. The charges realised by Farias or Beparis from the growers vary from station to station as the following figures will show:—

Excess charged from sellers per 100 maunds.

Station	Muthi	Bachat	Dhalak	Total
	Seers.	Seers.	Md—Sr	Md—Srs
Lalpur	20	20	3 0	4 0
Munshirhat	13	12	2 20	3 5
Mirzapur	5	5	2 20	2 30

Bachat denotes the quantity to be rejected as of inferior quality. Dhalak is the customary allowance. Muthi means the quantity taken at random.* Where the Bepari is sent out and financed by a dealer or Aratdar with instructions about the rate to be offered, he will get only 9 pies per maund if he works on the commission basis and if he works independently, he is free to pay any price below he rate fixed and appropriate the margin himself. It is only when he finds that the grower's rate and the Aratdar's rate leave him little margin that he takes recourse to underhand tactics. He damps the Jute for increasing the weight so as to give him a high rate of profit. Another method is to water the Jute and to strew sand on it to hide the moisture or to place a clod ot earth or piece of stone inside a tightly tied bundle of loose Jute to increase the weight. "It is certain that little

*Mofussil Marketing of Jute—Dr. H. Sinha in Indian Journal of Economics, December, 1929.

watering of fibre is done by the cultivator and that this evil is perpetrated by the petty dealer."*1

In the tobacco trade in Northern Bengal, purchases are made in the villages from the growers by merchants through Dalals or Paikars. These merchants stay in the house of the Paikars and go about with them for their purchases. The Paikars get commission at the rate of 4 to 6 annas per maund from both parties for their services. In some areas Dalals employ Paikars for making their purchases and store their produce in their warehouses. They advance money through the Paikars to the growers sometimes even at sowing and enter into agreements for the purchase of their crop at very low rates.

In the marketing of cotton in the Madras Presidency the village buyer goes round the villages with local brokers who get a commission of -/4/- to -/8/- per pothie. In the Tiruppur tract, "on the Shandy day at Avanshi, petty merchants visit the village or wait on the road side under the trees with the Salters' spring balance tied up and make purchases of headloads of Kapas brought by small cultivators. Such a trader is not popular as he is believed to tamper with the spring balance to his advantage."*2 While in the Adoni market in Madras Presidency, the grower usually takes his produce to the market himself and sells outright through a broker, in Bellary the brokers dominate as through their itinerant agents or dealers they make advances to growers with a view to secure their crop.

In the marketing of paddy in Assam, Beparis from Bengal visit the villages as soon as the rivers begin to rise and make their purchases in Hats and in villages usually on a cash basis. In the marketing of the famous Nellore rice of Madras the rice millowners advance money to the growers at 12 per cent rate of interest and the purchases are made through "Dalals" or brokers who buy paddy in the villages on a commission of Rupee one per

*1. Report of the Jute Enquiry Committee, page 13.

*2. Finance, Sowing and marketing of Cultivator's Cotton in the Tiruppura Tract by S. V. Duriaswami (Agriculture and Livestock in India, January 1935).

putti of 720 Madras measures and arrange for the transport of the produce to the mill. In Cocanada, the millowner sends his broker for the purchase of the paddy. Payment is usually made one week after the receipt of the bags in the mill, but if the grower is in the need of funds, the Broker gives him a slip called "Baratam" on the following form........"Please pay to........or to his order a sum of Rs.........and debit the amount to my account." The broker arranges for the transport of the bags to the mill and during the period of transit he is responsible for the commodity. In Bengal the Beparis who deal with the Calcutta market are under a great disadvantage as they cannot sell direct to the rice mills but have to do so through the Aratdars, who usually adopt various devices to cheat the Benparis. In the Backerganj district however a large percentage of the paddy is exported after being husked and here the Beparis play an important part as they go in boats to the villages and bring the rice to huskers at important centres of rice trade.

In the marketing of groundnut in the Madras Presidency the village merchant plays an important part as he usually finances the grower on condition of sale after harvest at a stipulated price. If the merchant happens to supply seeds also on credit, the Ryot has to return the seed plus 50 per cent of the quantity supplied just after the harvest. This system known as "Nagu" is very favourable to the merchant as he obtains a high interest, and makes further a double profit in the shape of purchase at low rates and in the weighment of the produce. In South Arcot is to be found a system known as "Unfixed Contract" The ryot is paid upto 80 per cent of the market value at the day's price but no price is fixed at the time of sale. If the price falls, the buyer may call on the seller to make up the difference, while if it rises, he does not inform him. If the seller insists on having the price fixed on a particular day when the price may have risen, the buyer pleads his inability to fix the price for the entire lot and the seller is compelled to agree to it and if the price falls immediately after that he loses heavily. "The most remarkable thing

in this gamble is that the actual stuff held under the unfixed contract would have been shipped to Marseilles days ago."*1

In sugarcane the chain of middlemen is not large as the cane plantations are usually in the neighbourhood of the mills and the growers supply direct to the mills, usually on the receipt of an advance. In the Darbhanga district of Bihar the growers plant cane without any agreement but in July when the cane has attained a fair height they are given an advance without interest on condition of supply at a definite rate, which is nominal as the actual rate is higher, being fixed on the basis of half anna per maund for each Rupee of the current price of refined sugar plus half of one anna. The cane purchase system in the Saran district where mills are located mainly on railway lines, admits of middlemen in the form of a contractor with a defined territorial jurisdiction. No advance is given and the ryot has to deliver his produce at the railway station to be weighed on the contractor's weighbridge. The ryot rarely gets an advantageous rate as it is difficult for him to dispose of his produce elsewhere. In the purchase of Gur, the itinerant Beparis manipulate the prices as they like. In the Gur trade in Poona district the producers carry the Gur on their carts to the shops of commission agents at Poona who sell on their behalf. In the Surat district gur is transferred into earthen pots made locally and the unit of of sale is such a pot with Gur filled to the brim. The Bulsar merchants make their purchases through the village Bania or a "Fatakia" Dalal. The fatakia Dalal keeps himself in touch with the Gur producers of the locality and helps the merchant to make his selection and he is also entrusted with the work of despatching the commodity to the town market.

In the cane growing areas of the United provinces a special type of Mahajan has been developed called the Khandsali whose function is to advance money to the cane-grower before the crop is ready on the condition that the juice will be sold at a rate much lower than the market rate. The grower uses the canecrusher supplied by the Khandsali for which he has to pay rent.

*1. Chetty—Cooperative Marketing of Agricultural Produce in South India p. 15.

In the marketing of fruits, particularly of mangoes, the common practice in Bihar and Bombay is for the plantation to be sold while in blossom to a class of middlemen called Kunjras in Bihar and Bagwans in Bombay. They base their offer on their estimate of the yield, the nature of demand and transport facilities. Purchase is usually by contract although auctions sometimes take place. The price is payable in full before occupation or in instalments, one half at the time of signing the contract and the balance when half the crop is harvested. In Assam the orange growers sell fruits to Beparis who attend all the hats and they in their turn sell to Aratdars who arrange for their despatch in boats. In Sylhet, in addition to local Beparis, agents of merchants of Calcutta or Narayangunj collect fruits in the orchards or in their camping grounds near the Bazars. Sometimes they purchase an entire orchard when the fruit is young and suffer losses due to failure of crops.

In the secondary stage of marketing the Aratdar or the commission agent plays a leading part in moving the produce nearer to the exporting or consuming point and in keeping the market steady by arranging for the storage and gradual adjustment of supply to the demand. In the wheat trade in smaller markets the growers directly or through Beparis sell to the Banias. The produce is put to open auction and the seller has the option of rejecting the offer of the highest bidder. In the bigger markets however, in place of one Bania middlman, there are two, the Kacha Arthi and the Pukka Arthi. The former acts as a commission agent to the growers and petty dealers and exporters. The Pukka Arthis make their purchases through the Kacha and as they work on a very small margin their profits depend on the volume of their business. In the market, the Kacha Arthis sell the produce by open auction at which the Pukka Arthis bid after which the Kacha Arthi has to perform an important duty, viz, the fixing of the Karda or allowances for dirt and this depends on the purity of the produce. Delivery is given in the warehouse or Ahata of the purchasing Arthi where weighment takes place and on the actual weight certain deductions are made. Payment of the price is made by the selling Arthi on his receiving the purcha or the

slip of the purchasing Arthi who makes his payment either on the evening of the same day or as is more usual on the third day after the sale. Thus the Kachha Arthi as the agent of the seller is interested in securing as high a price as is possible and in arranging for the correct weighing of the commodity. His duty is also to see that the seller is not saddled with any undue allowances or deductions and he makes the payment soon after sale and takes on himself the risk of realising the amount from the buyer later on. The Pukka Arthi as the agent of the buyers saves them from the expense of having to maintain their own agents at important centres, and he is in touch with the market, his advice about the purchases is invaluable. In many Punjab wheat markets there is a third class of Arthi called...... Kachha pakka, who work both for the buyers and the sellers. These Arthis are to be distinguished from Dalals or brokers who act merely as the connecting link between the buyer and the seller. They have no godown of their own and the only capital which they own are "a towel and a notebook." Owing to their great intimate knowledge of the trade they give valuable advice to the buyers about the condition of the market and they are execellent judges of the quality, colour and weight of the produce and the proportion of foreign substances present in it. They are indispensable in the organisation of urban wholesale markets. Yet as sometimes they act both for the buyer and the seller, they try to take undue advantage of their position and publicity is the only safeguard against this tendency. The following case illustrates how the interests of the parties suffer. "I found one buyer, protesting against an Arthiya settling an auction of a heap of wheat by purchasing it on his own account at Rs. 3-1-0 per maund. When the bid was at Rs. 3-0-6 per maund the Arhtiya suddenly said...... "Rs. 3-1-0 per maund......Koi bolega" and then in the same breath added, "ho gaya", thus giving the others no chance of bidding higher. A buyer was ready to give Rs. 3-2-0 per maund but the Arhtiya said that he should have spoken earlier. The seller was not present at the auction."*

*Finance and Marketing of Cultivators' Wheat in the Punjab by Shah ad Dawar p. 63.

Thus as the Bepari links the village with the small market, the Kachha Arthi acts as the link between the small market and the big organised market. The Pukka Arthi on the other hand, "is the primary distributor of agricultural produce and as such he stands at the apex of the structure of Indian marketing with the Kachha Arthi and dealer in the small mandi in the middle, and the village Bania, Bepari and cartman at its base."*

The Aratdar dealing in Jute in the interior of Bengal does not boast of large warehouses as the Pakki Arthi in the United Provinces can. Their main function is to arrange for the collection of Jute from the villages, and its delivery to the Baling and Pressing Company. They have to make advances to the Bepari occasionally and this is done mainly on the guarantee of the brokers or Dalals and in these cases he is assuerd of a steady supply. In some areas like Serajgunj the Baler is developing a tendency of eliminating the Aratdar and of dealing with and financing the Bepari directly. The small Baling stations where Kuchha Baling is chiefly done have a small staff under a Manager, who gets a share in the profit besides his pay. Thus in the rural areas, the Aratdar's position in Jute is not very important and he is at best a commission agent, but in the Calcutta market particularly in loose Jute and Kachha bales his influence is very great.

With the exception of Cossipur the Aratdars at other centres have their own godowns where they carry on business on their own account as well as on behalf of Beparis or dealers from the interior. The Aratdar pays the freight as well as other transport charges and on the delivery of the goods he advances upto 50 per cent of the value. The Aratdar at the Cossipur market is purely a commission agent and he arranges for inspection by intending purchasers of the goods in the railway warehouses. The business terms of the Calcutta Aratdars may be grouped into two classes, the Kachha and the Pukka. In the former there is no liability on the part of the Aratdar if the purchase money is not paid by the buyer, while in the second, the entire

*Report of the U. P. Banking Enquiry Committee.

responsibility for payment is accepted by the Aratdar. Among the charges realised besides the commission are godown rent, insurance for the period of storage, Dalali for payment to the buyer's broker, Ojan Sarkari or weighment fee, Cashiery and Jalpani paid to meet the establishment charges of the buyer, and hire of the Tarpulin used for protecting the Jute.

In Cotton the importance of the Arhatiya or commission agent varies from place to place. In the Adoni market in Madras Presidency the ryots prefer not to wait for the sale of their cotton and the commission agents put the buyer and the seller together, but in the neighbouring Bellary market, if the cotton is not sold on the same day the growers leave it with commission agents who sell them on their behalf and accept an advance of 50 to 60 per cent of the value. The growers are completely at the mercy of the Adatya and he has to accept whatever rate the latter obtains for them. In Berar where the markets are regulated, besides acting as the seller's agent, the Adhatiya on behalf of the sellers fixes with the buyers the ruling local rate of the day at which the sales are to be made and also supervises the weighing of the cotton carts in the ginning factories. Like Adoni, at the Yeotmal cotton market in the Central Provinces the Adhatiya has to pay up the grower the price on the evening of the day on which it is to be sold, but at Dharwar the Adhatiyas sell the cotton on behalf of the grower and pay him at his convenience although the latter has the privilege of demanding payment at the daily market price of cotton on any day during the next two months. The Adhatiya thus not only finds a buyer and settles the bargain but also undertakes the responsibility of payment and in many cases has to pay the amount himself and to settle his account with the seller later on. In west Khandesh the Adhatiya sometimes advances money to the growers on condition that they sell their produce through them. When the grower brings his cotton to the market the Adhatiya's Dalal takes a sample from the cart, shows it to the intending purchaser, settles the bargain with them, takes the cart to the ginning factory and gets it weighed and gives the grower a slip showing details of his account on the presentation of

which the Adhatiya pays him the full amount and charges a Commission varying from Rs. 1/8/- to Rs. 2/- per cart, The Adhat system in the Dhulia market is so well organised that it ensures prompt and cash payment and a high order of business honesty.

In Madras Presidency the bulk of the paddy trade is carried on by the Khaida merchants who in many cases pay advances to the growers and petty dealers and their remuneration includes commission, kolagaram or weighment fee, Dharmam or charity contribution, Gumasta Rasum or payment for account keeping, interest for the advance and rent for storage. The rate at which the grower will be paid is usually pre-arranged. In the Kistna Delta, the ryots take paddy by cart to the mraket town and sell it to the merchants direct or through commission agents, in the latter case they are completely at the mercy of the agents for the price they get. In Bengal paddy is usually marketed through Arhatdars who supply to the shippers or ricemills. The Aratdars sometimes combine trading on their own account with commission business and this often injures the interests of the Beparis. In the Central Provinces the merchants employ an army of agents who receive twelve annas per cent on the purchases as their remuneration. These wholesale merchants buy outright and sell to retailers on credit giving them 8 to 15 days time. In the province of Orissa the Arhatdar controls the supply mainly by giving advances which may be of two types;— (1) Small advances given on condition of delivery at stipulated price and stipulated date but carrying no interest and (2) advance for delivery at market prices at interest varying from 12 to 18¾ per cent. The Cuttack Arhatdars undertake to pay the Beparis in 7 day's time and if a cash payment is demanded a discount at the rate of 4 annas per cent is deducted.

The system of agricultural marketing in India is saddled with a long chain of middlemen, and the remuneration for their services increases the load of the consumer although the producer does not derive a similar benefit, but considering the lack of organisation of the farmers and their economic weakness it must be admitted that the middlemen perform the great function of oiling the wheels

of trade and make them smooth running. Petty cultivators engaged in making a precarious living on their small holdings often hail the Bepari or Paikar as the sole means of converting his surplus produce into liquid resources. These Beparis move about from village to village with their carts, boats or donkeys or camels collecting these little driblets which later on swell the mighty stream of commerce. The advances which they make to the growers from time to time no doubt creates an obligation to market through them but these are of the greatest importance to them as they keep them going through all the months of waiting till the next harvest is ready. "In the present system of communications, this indigenous system which has grown up spontaneously to meet an existing demand, has worked and continues to work on the whole satisfactorily and although it is easy to complain that these persons make their living out of the cultivator it is obvious that all persons have to earn their living in one way or other."*

It does not require much imagination to recount all the abuses and the iniquities of this system, many of them are real and demand reform but some of them arise out of the chaotic state of marketing and lack of any organisation. In the tobacco trade in the Guntur district of Madras, the grower brings the cured leaf in bales to the market without grading or sorting it. Had the tobacco been graded properly the Arhatdar would have been able to quote for each quality separately and the grower would have obtained the maximum price for it. Further, on the average 5,000 bales come every morning to the market on 800 to 1,000 carts. A perfunctory examination of the bales is made and the price fixed accordingly and this is usually to the disadvantage of the seller. Further as there is no organisation in the market, and only 200 men have to handle daily 5,000 to 6,000 bales, and deal with each seller individually, it means time and the grower has to wait indefinitely or if he is unwilling to wait he leaves his produce at the mercy of the middlemen. Besides this, in the marketing of many commodities like cotton although the seller is

*Report of the C. P. Banking Enquiry Committee page 199.

present when the sale is made he is quite ignorant of the offers made by the buyer or his agent as the allowance for dirt is usually settled by the seller Arhti and in doing so he favours the Pukka Arhti as "the secret understanding is that if he gives a good allowance, the purchase money will be paid that evening, otherwise according to the custom of the Mandi, on the third day." Thus the interests of the seller are sacrificed by those very persons whom he employs to safeguard them and this is so because there is no market regulation.

The middleman, as a moneylender exercises a great influence over the producer and this is very often used against him. At Bellary the Dalal dominates the market mainly because he gives out liberal advances to secure the produce and this business fast degenerates into pure moneylending. When due to a failure of crops, the grower is unable to repay and the bad debts of the Dalal increase or his assets become frozen, the business of marketing suffers.

The use of false weights and cheating at the time of weighing are too common with our middlemen. Some merchants while buying in the villages represent that they would buy at current Town market rates but they make up for the cost of transport and their profits by a clever variation in weights.

Adulteration either by damping the produce or mixing it with other stuff is mainly done by the middlemen and rarely by the growers as is comonly supposed and this increases when prices rise and supply declines. It has been pointed out by the Indian Cotton Committee that malpractices of this type are rampant in the ginning factories. "The Okara commission agents admitted that a good portion of the shortstaple cotton is mixed with long stapled American cotton but asserted that exporters insisted upon this being done and that any factory refusing to do it would be ruined."

In view of the fact that the middleman has to shoulder all trade risks, the margin of profits, on the whole is not

large. The bulk of his profits depend upon the fluctuations of prices and on the economics of large scale business. The risk of loss is equally great. One of his main functions is to hold up and store produce and for this he has to borrow at 7 to 9 per cent rate of interest, pay for storage accomodation and provide for allowance for wastage which in the case of wheat varies from 2½ to 5 per cent. According to the estimate of Mr. W. Roberts, Managing Director of the British Cottongrowers Association, it would not pay to hold up wheat in the Punjab unless there was a margin of 6 annas per maund in the maximum and minimum prices of wheat and this margin was available only twice in 7 years between 1924 and 1930, thus during these years the middleman's losses must have been very heavy. In his study of the Canal Colony Markets Mr. M. L. Darling points out that in view of the large volume of work handled by them the income of the commission agents is not high.

Market.	Annual Income of the Market from Commission business.	Average Income per Commission Agent.
Gojra.	Rs. 2,29,180.	Rs. 1,647.
Okara.	Rs. 1,11,248.	Rs. 1,100.
Toba Teksingh.	Rs. 69, 000.	Rs. 1,325.
Chichawatni.	Rs. 82,356.	Rs. 2,165.

The real evil perhaps is in the tendency of the middleman to exploit the ignorance and helplessness of the farmer and to increase his profits by manipulating the rates. The farmer is accustomed to being exploited by the agents of the landlord and by the village mahajan, hence he has not struck out against the middleman boldly to keep down the glaring inequalities in the prices. In Rohilkhund, for example, when wheat sells in large Mandis at the rate of 8 seers per Rupee, the grower has to sell in the village Mandi at 9 seers. In the Lucknow District, the Bania keeps ordinarily a margin of at least 12 per cent in the rates

which is unwarranted in view of the low transport charges there.

Thus the middleman carries on his important function of facilitating the course of trade in the midst of a population, ignorant and unorganised, economically weak and helpless. The abuses which have crept in are real no doubt but these are mainly due to the lack of control and organisation of the market. Till any other suitable system is devised the middlemen can not be done away with although their number may be reduced.

The antiquity of this institution of middlemen goes far back in history. Plato in his ideal Republic recognised that in the market there will be "people there, who seeing this want (of the producer) will take upon themselves the duty of sale. All they have to do is to be in the market, and receive money of those who desire to buy goods and in exchange for goods, pay money to those who desire to sell." In a scheme of economy based on division of labour, the middlleman has an important place as by taking up the function of distribution he saves time and labour for the producer and the consumer and brings about a proper adjustment between production and consumption. Elimination of the middleman, therefore, is not a practical proposition as the tendency of the consumer is to utilise the services of the middleman in as many ways as possible and "the problem before us today is not how to produce the goods, but how to produce the customers. Consumptionism is the science of compelling men to use more and more things." It is no doubt desirable to reduce the cost of distribution by organising these services better and making them more direct. Marketing reform to a large extent depends on improving the productive system, the better assembling of goods, their classification and standardisation, proper storage and transportation, diminution in trade risks and better publicity. When an improvement has been effected in all these links in the chain, then can we expect to improve the actual marketing organisation and reduce the cost of the distributing service. Efforts have

been made in the United States to make a direct attack on the high cost of distribution by the development in the sphere of retail sale of a system of chain stores and mail order houses while cooperative organisations have effected economies in a number of ways by lowering the cost of distribution. "The graded standardised product of uniform quality and grade means cheaper transportation, cheaper storage, lower sale costs, cheaper credit. These are substantial savings in cooperative marketing which benefit both producer and consumer"* In India cooperative marketing is yet in its infancy and the organisation is now far from perfection, yet the investigations of the Indian Cotton Committee have shown that in some areas of the Madras Presidency, in marketing a parcel of groundnuts and jaggery, the cost of distribution was 1.5 per cent less in the case of cooperative marketing and the producer was assured of correct weights. In the Punjab in the grain trade where the ordinary middleman's charges vary from Rs. 2-5-0 to Rs. 2-14-0 per cent, the cooperative commission shops charge 43 to 55 per cent less. In the Canal Colonies alone, as estimated by Mr. M. L. Darling, "were the whole business handled cooperatively the saving would probably be about Rs. 2 lakhs and it may be Rs. 40,000 more were there no charges for religion or charity."

*Boyle—Marketing of Agricultural Products page 95.

CHAPTER III.

MARKETS.

Marketing in India starts in the village, or in the nearest Bazar or Hat from where tho goods passes to the consumption points through a series of markets. The Hat or periodical market is a socioeconomic institution as in it not only the purchases and sales of the produce of the neighbourhood and also of imported goods takes place but very often it is the centre for the collection of rent by the landlord's agents or realisation of interest by the mahajan and in regions like Chotanagpur these Hats afford great opportunities for promoting the social intercourse of the people of the villages.

In the Central Provinces Bazar villages have sprung up at a distance of 5 to 10 miles from one another where weekly or biweekly markets are held. Many of these later on develop as cattle markets with permanent sheds for the cattle awaiting sale. Many of these are under the control of the District Councils who construct platforms and sheds and also look after the sanitation of the locality. In rural Bengal, permanent bazars do not exist but Hatkhola or market places are to be found at a distance of 5 to 6 miles from one another. In Bengal the number of hats is 6786, in Assam 897 while in Bihar and Orissa there is one market for every 29 sq. miles and for 11,700 persons. The average attendance at these Hats, on the supposition that the male adults of the locality above the age of 15 go to the hats once a week. varies from 5,000 to 9,000 in Bengal in Assam 500 to 1,000, and 1,000 to 5,000 in Madras. The average area served by a market varies in different provinces and even in different districts of the same province according to transport facilities, existence of roads, nature of commodities produced and the economic condition of the people themselves.

Province.	District.	Area served by an average market. Sq. Miles.
Bengal	West Bengal	31.
	North Bengal	57.
	Central Bengal	30.
	East Bengal	49.
Assam	Goalpara	36.
	Kamrup	94.
	Nowgong	86.
	Sylhet	15.
Madras	Godavari	52.
	Bellary	114.
	North Arcot	85.
	Ramnad	88.
	Coimbatore	93.
	South Kanara	134.

In Bengal, 50 per cent of the Hats have no more than 20 shops, the average number of shops varying from 28 in west Bengal and 41 in central Bengal, 34 in north and 66 in eastern Bengal.

In many of the Punjab Districts, the average sized market serves villages within a radius of 35 miles. From the figures collected by Shah and Davar in their enquiry into the finance and marketing of Cultivators' Wheat in the Punjab we find that "while 44 per cent of the total amount of wheat sold was brought from a radius of 10 miles, the average quantity per seller was greater for longer distances." In the transport of cotton, the farmer prefers a cart to a camel or a donkey, hence where the roads are good, the market commands a wider area. Chichawatni in the Montgomery District has three markets within a radius of 30 miles while Sonepat has two within a distance of 12 miles. With the expansion of motor communication the radius served by a market is increasing. The stock of carts in the rural area has an importance influence in determining

the location and size of the markets. The following table will give a comparative estimate of the stock of carts in different provinces:—

Province.	Stock of carts per 1,000 Population.
Bengal	17
Bihar & Orissa	14
Bombay	31
Central Provinces	71
Madras	26
Punjab	11
U. P.	20

It may be noted that in C. P. and Bombay the number of carts is fairly high as it is necessary for the transport of cotton while Bengal has few carts in view of its lack of roads and the large percentage of the carrying work is done on boats.

Even though with the improvement in the means of communication in India, the village is being taken out of its ageold isolation and linked with the chain of markets of all sizes and grades it can not be said that the road between the producer and the consumer is open and direct and the farmers have a free and competitive market in which to dispose of their products. Our system of marketing is responsible for increasing the cost of distribution and waste in various ways which affects the producer as well as the consumer. It has already been stated that in our price structure the middlemen's charges figure very prominently, yet Indian wheat gets a low price in the foreign market due to the presence of impurities. Indian cotton is very often found to be damped and adulterated and the packing of fruits is so bad as to make them unfit for human consumption. Thus although the cost of distribution is high, the services rendered by the distributors are not at all efficient and there is ample scope for reform in this direction.

In Northern India, the marketing of wheat is principally confined to the Mandis. In the U. P. many Mandis deal in all kinds of agricultural produce but in some of the more important centres, owing to favourable local conditions gradually some markets have specialised on a commodity basis, e.g., the Mandis of Deoband, Shamli, Ghaziabad, Hapur and Meerut trade in wheat and the Mandis of Khekara and Dankuar are Gur Mandis.

The smaller Mandis in big village centres or subdivisional towns are mainly engaged in the collection of wheat during harvest for despatch to the bigger Mandis. There is very little competition at this stage and the dealers and sellers have little information of world markets, the rates at these Mandis depending on the prices at the bigger market centres. Some of the bigger Mandis like Ghaziabad are unorganised while Hapur which has the biggest wheat Mandi in the U. P. is well organised. Before 1924, no Mandi was organised in the modern sense but there was an unwritten code of conventions which governed business practice and it was enforced by the Panchayat. With the increase in speculative transactions and forward contracts, this code of conventions could not give any guidance or control the abuses which soon cropped up. The law courts condemned these speculative transactions as pure gambling. To improve this state of things and to bring about a better organisation of the market at Hapur a Chamber of Commerce was started in 1924. It was registered as an association of the Arhtis, Millowners and grain merchants under Act VII of 1913. Its main objects were "to protect and promote the trade and establish just and equitable principles in trade and to form a code of practice to simplify and facilitate transactions of business between merchants dealing in grain." Thus it was purely an organisation of merchants aiming at the safeguarding of their interests. The grower had no place in it and his interests were likely to conflict with those of the middlemen. However some advance was no doubt made. The Executive Committee of the Chamber have codified the market practices and some of the most glaring malpractices have been checked. About

60 per cent of the Commission agents at Hapur have joined it and this movement has spread to other Mandis. The Hapur Mandi is in telegraphic communication with the ports and foreign markets, e.g., Chicago, Liverpool and London and it broadcasts market information through an evening daily journal called "Vyapar" which has a wide circulation among the other Mandis. That the organisation inaugurated at Hapur has helped to cheapen the cost of distribution, which is a direct gain to the producer is illustrated by the figures of the middlemen's charges taken from an organised Mandi (Hapur) and unorganised Mandi like Ghaziabad.

CHARGES AT DIFFERENT MANDIS

(Value of wheat is Rs. 100).
Sold by Grower.

Items.	Ghaziabad.	Hapur.
	Rs. A. P.	Rs. A. P.
Octroi	0 8 0	Nil.
Tolai	1 9 0	1 4 0
Charity	0 1 0	Nil.
Dane	0 10 0	0 10 0
Extra weight	0 8 0	Nil.
Bag Allowance	0 8 0	0 3 0
Karda	0 5 0	0 5 0
Wages		0 3 0
	4 3 0	2 9 0

In some of the smaller and less organised wheat markets the charges are even more varied:—

(per 100 Rs. worth of wheat).

Item of charges.	Gojra.	Batala.
	Rs. A. P.	Rs. A. P.
Arit (commission)	0 0 3 per bag.	0 0 3 per bag.
Chungi (octroi)	10 seers for 100 bags.	10 seers per 100 bags.

Kat (discount on cash payment).	Nil.	0 0 3 per Rs. 100
Karta (deduction for dirt)	Nil.	Nil.
Rolai (charge for rolling wheat).	0 0 2 per bag.	0 0 2 per bag.
Tolai (weighing)	0 2 6	0 0 6
Palladari (Labourer's wages)	0 2 6	0 0 4 per bag.
Shagirdi (Apprenticeship)	0 1 0	Nil.
Chhani (cleaning)	0 0 9	0 0 6
Payment to the Mandi officials		
(a) Chuha (sweeper)	½ seer per heap.	½ seer per heap.
(*b*) Mehra (watchman)	½ seer per heap	½ seer per heap
(*c*) Changar	¼ seer per heap	¼ seer per heap
Chaukidar	¼ pice per bag	
		Rs. A. P.
Dharmao (charity)	0 0 6	0 0 6
Goushala	0 0 3	0 0 6

It may be of interest to compare with these the rates of deductions made in the marketing of cotton in the different parts of India. At Jalegaon in Khandesh, the buyer pays six annas per cart containing cotton weighing 480 seers and the sellers pays nine annas which include discount and weighment charge 0—6—0, Dharmao 0—1—0 Bhatta 0—0—6, Pinjrapol 0—1—6. In Broach the cultivatorseller has not to pay any customary charges, while in other markets charges at the following scale are levied:—

Brokerage	0 8 0	to Re. 1 0 0 per Bhar.
Dharmaday	0 2 0	to Re. 0 5 0 per Bhar.
Discount	0 6 0	percent if payment is made in cash.
Insurance	0 4 0	to Re. 0 8 0 per Bhar.
Mehta Sukhadi	0 4 0	per Bhar.
Sample	1 to 3 lb. per Bhar.	

In Sind the deductions are more varied. "Tabro" is a charge of 3 to 5 seers on account of weighment. Dalali is at 0—0—3 pies per maund of Kapas sold. Any small quantity less than one maund left after weighment is not weighed but goes to the Sowcar bania as "Burno." The Hindus have to pay for Dharmao and Muslims for "Toiki" at the rate of 0—0—3 to 0—1—6 pies per maund. Sethai is a small charge per maund realised from the sale of the produce of the Sowcar's debtors while Panchayati is realised from all at the rate of 1/8 seer per maund.

The following table gives a comparative estimate of the total market deductions in cash per Rs. 100 worth of wheat in the different markets of the Punjab.

Ferozepore Cantt.	2 7 6 to 3 4 6
Moga	1 0 0
Fazilka	0 14 9
Chak Jhumra	1 5 3 to 1 10 3
Toba Tek Singh	1 7 6 to 1 15 6
Jaranwala	1 13 3 to 2 6 3

Besides these in many cases, deductions in kind are also made, e.g. 3 seers per cart at Moga, 2 seers per cart plus 4 chataks per maund at Fazilka.

In the organised market it may be noticed that some of the unnecessary items like Charity, extra weight etc. have been omitted while the others have been reduced. Thus the charges at Ghaziabad are double that of Hapur. Analysing the charges paid at these two Mandis, we find that the Seller Arhti gets 32.9 per cent and the Buying Arhti 40 per cent as their remuneration while as much as 27 per cent is eaten up in miscellaneous charges. The corresponding proportion at Hapur are for the Sellers' Arhti 48.7 per cent, Buyers Arhti 43.9 and miscellaneous charges amount to only 7.4.

There is very little intertrading at these Mandis as all of them despatch directly to consuming centres like the

Flour Mills of Delhi, Cawnpore and Calcutta or to the ports. Many of these Mandis have arrangements for storing up the produce, even for long periods and the banking facilities which they can avail of are quite sufficient.

The Grain market or Ganj in the northern part of the C.P., is open square without any covered shed or paved floor while the shops of the merchants and commission agents are around it. The space in front of the shop is claimed as his by the Aratyia and he keeps that space clean and plasters it with cowdung and mud. The Ganj is the property of the Municipality or a Notified Area Committee which licenses the agents and weighmen and also charges rent, but there is very little effort to control the market with the result that the middlemen's charges are high. They may be divided into three groups (a) Marketing expenses including (1) Octroi in big towns at 4 annas per cart or 2 annas per bag (2) Adath or warehouse charge from 8 annas to Rs. 1 per cent, (3) Dalali for the broker at 4 annas per cent, (4) Majuri or wages at the rate of one anna per bag for unloading the bags from the carts, kattai or opening out the bags, Dheri or heaping the grain, Safari or cleaning, Chadai or placing the grain on the scales and sewing up the bags, (5) Tulai or weighman's charges which amount to 8 annas per cent, (6) Mutti is an additional payment, (b) Charity funds including contribution for Dharmadaya or charity funds for Ramlila or religious operas at one anna per seller, temple, school and Gowshala funds, (c) miscellaneous charges including the money-changer's discount when farmers have to encash the currency notes in which the Aratiyas have paid them and also petty deductions called Bhunj for procuring small changes required to square accounts.

In the canal colonies in the Punjab the market consists of shops built round three sides of a rectangular plot having a wide brick pavement where the produce is unloaded, weighed and bagged. The central place is intended for the parking of carts. The number of shops in a market varies from 40 in Sonepat to 91 in Lyallpur and about 55 per cent

of the dealers belong to the Arora caste, while 18 per cent are Khatris and 16 per cent Banias. Most of these markets have a committee to control them under the auspices of the Municipal Committee of the locality with usually an official as president. A noticeable feature about these committees is that about one third of the membership is from agricultural classes, but these committees do very little to safeguard effectively the real interests of the producers. Some of these markets have informal Panchayats of market Chaudhuris in place of these committees. Although the arbitration work done by these Panchayats is often very useful, they have a poor record of continuous work owing to frequent differences of opinion among the Punches and the lack of any code of practice. The following three cases may be cited to illustrate the type of arbitration which they do. These are taken from a study of "Marketing in villages and Mandis" which Mr. M. L. Darling, I.C.S. contributed to the Punjab Banking Enquiry Committee. At Chichawatni the Punchayat rejected the application of the local Ginning factories for permission to pool their business. In another case, it was alleged that firm "A" had persuaded the creditors of firm "B" which had gone into insolvency to accept 10 annas in the rupee on the private understanding that its own claims would be paid in full. The Punchayat fined firm "A" rupees 25 and the money was paid to the Goshala fund. (3) The lack of strength of the Punchayat was brought out in a case where it was alleged, that the bigger firms were using full sized bags in buying and smaller bags in selling. As many of the prominent merchants were involved the Punchayat did not take any penal action but resolved that any proved defect in the weight should be deducted from the price.

As an illustration of the attempt to improve the market organisation by voluntary efforts of the dealers, the history of the Amritsar Sugar and Grain Association may be cited. The development of forward trading in grain at Amritsar made the organisation of such an Association imperative and it was started in 1917 on a share basis, open to grain dealers at Amritsar. The value of each share was Rs. 1000

and the maximum holding was limited to 5. The Association makes it compulsory for registration with it of all future sales and the deposit of Rs. 100 for every 500 maunds of wheat bought with a view to cover price fluctuations. The Association arranges for the arbitration of business disputes and for giving out of advances against grain to dealers at very low rates of interest. It has constructed warehouses called kothas which carry a rental of Rs. 111 per month per kotha. The members have to deal only with members and only the Dalals recognised by the Association can be employed and these Dalals are required to sign in the books of the Arhatiya immediately after a bargain has been struck with a view to bind them to fulfill the contract within the stipulated period. The Dalal has to pay a licence fee of rupees 11 per head and if he ever makes a ready purchase on his own account, he would not be allowed the customary market allowances which are ordinarily given to bonafide buyers. The Association has provided for the checking of weights and scales in the markets and has installed out of his funds one Dharm Khanda (standard scale) at a central place in the market.

The Indian Merchants Association was started at Lyallpur with the commission agents as members with a view to promote trade and to settle disputes. The admission fee was Rs. 18 and the monthly subscription Rs. 2 and the members were given the privilege of paying brokerage at rates much lower than those paid by nonmembers. The Association tried to improve the tone of business morality by stamping all weights used in the market with its own seal and also laying down a rule whereby if anyone who being indebted to the commission agent tried to sell through another, the latter was to pay up the debt or refuse to deal with him. The arbitration procedure was also effective. The parties in disputes were to select one arbitrator each from the members of the Managing Committee and the Committee was to appoint a third arbitrator. The unsuccessful party had to pay costs of the arbitration at scales laid down by the Association, half of which went to its funds and half was paid to the arbitrators. This Associa-

tion was however wrecked by the growth of factions and it was replaced by the Lyallpur Commission Association in 1929 which ensures that prices are not depressed by underhand dealings and unfair competition.

In Bengal an attempt has been made in recent years to organise Market Associations in the paddy trade by voluntary effort, the details of one of which may be stated as a specimen. The Daspara Dhanya Aratdar Samiti (Daspara Paddy dealers Association) is one of the latest additions to the list. The rules provide that on admission to membership every Aratdar has to give some pledges which include the nonpayment of bribes or presents to Beparis with a view to secure trade and to allow the inspection of the books by the Association staff. The general meeting takes place every Friday and any member failing to be present without sufficient cause has to pay a fine of rupee one which is described in the rules as a deposit to uphold the honour of the Association. Every member has to pay an admission fee of Rs. 51 and a monthly subscription of Rs. 2. The Association has laid down elaborate rules governing business transactions and market charges. If a member commits any breach of rules, he has to pay a fine of Rs. 101 for every act of violation. The Association does not allow any member to stock in his warehouse paddy purchased from neighbouring markets. A novel feature of the Association is the code of regulations for safeguarding the interests of the Beparis and Dalals.

These Associations represent the attempt of the dealers to improve the organisation of the markets and ensure business honesty. Although much advance has been made in this direction and the Association functions well in normal times, the strain on the loyalty of the members becomes very great when the market is depressed and the Association shows signs of disintegration. In view of the pronounced individualistic tendencies of the merchants the work of forming any voluntary organisation is not an easy one and the difficulties are much more increased when it comes into conflict with the vested interests of other classes. In the marketing of Gur in the Surat

District, there was no organisation before 1917 and up-country merchants used to pay whatever rates they liked as they were almost monopolists. One of them tried to introduce a new practice by which the local seller was to send Gur to the railway station at his own cost. This innovation was resisted and the producers formed an Association to arrange for better marketing and to secure better terms. They succeeded for a time but when the immediate danger was over, disunion among the members broke out and some of them fell an easy prey to the tempting offers of the merchants. The doom of the Association was finally sounded when one of the Kathiawar merchants who had purchased a large quantity failed to pay. The history of the Coimbatore cotton market illustrates how the best efforts of a section of the people to organise an Association with the support of the Government were resisted for a long time by the active opposition of the local merchants. At a meeting of the cotton growers of Coimbatore in July 1918 it was decided to form a Cotton Marketing Association and to request the Municipality to start a market at Tiruppur to be controlled by the Association. The Municipal Council agreed and the Governor of Madras laid the foundation stone of the market next year. The draft rules of the Association were approved by the Municipal council but the opposition of the commission dealers, Dalals and merchants increased in volume. At first it was directed towards the location of the market and when it was settled they attacked the very idea of the Association and its rules. Attempts to arrive at a compromise were made involving much loss of time and in the meantime the term of office of the old Municipal Council expired and the new body was unwilling to accept some of the main principles underlying the rules of the Association. Thus ended for a time at least the attempt to develop a Marketing Association at Coimbatore.

Official regulation of markets has been attempted in some provinces and the degree of official control often does not extend beyond the provision of shops or the maintenance of peace inside the market or the publication for

general information of the prices ruling in important markets. In the Madras Presidency markets are maintained by Local Boards and Municipalities where anyone can sell on payment of the scheduled fees and no attempt is made to standardise weights and measures. The regulation of markets began in India with the Berar cotton and grain markets Act of 1897 under which a more direct attempt was made to purge marketing of many of its abuses. It provided for the notification of markets and bazars and their control by the committees. Rules were framed for the levy and collection of fees, for the licensing of brokers and weighmen and also for the checking of weights and measures. In the Central Provinces there was no separate Market Act but the Municipal Councils were empowered to frame by-laws for the regulation of markets. The Berar Act no doubt proved very useful as it put the grower in direct touch with the purchaser and made it easy for him to obtain competitive prices.

The grower, further, is assured of proper weights and this system enables the buyer to satisfy himself by seeing actually the commodity and to offer prices according to quality. In spite of these disadvantages, the basic difficulty remained, viz., the committee was more influenced by the middlemen and placed their interests above all other considerations. The common experience is that the commission agent is partial to the buyer even when he is employed by the seller although in some of the markets of the Canal Colonies in the Punjab, for every transaction two men are employed, the commission agent working for the seller and the broker for the buyer. The position is also the same in the Punjab. "The colony market inquiry suggests that a powerful factor in deterring cultivators from marketing their own produce is the way the ordinary market is organised. It is dominated by the trader and the cultivator, when he goes there."* Attempts have been made recently to improve market regulation by limiting the number of licensed Adatyas and making the rules more

*Report of the Punjab Banking Enquiry Committee p. 51.

effective as well as by associating the growers in the control of the markets.

In the Central Provinces formerly the Municipal Councils managed their markets but the law gave them no power to include in the Market Committees those who were not Municipal Councillers, hence neither growers nor business experts could be appointed to the Committee and the members had other things to look into, hence these Committee were inefficient bodies. As a result of popular agitation and the recommendations of the Banking Enquiry Committee, special legislation for the purpose of market regulation was undertaken and the C.P. Cotton Market Act of 1932 was passed which marks a distinct improvement on the Berar Act. Under this Act on the Market Committee "not less than half shall be persons elected by cotton growers of such area as the Local Government may prescribe." Rules would be made by the Local Government for the election of members of the Committee, management of the market, licensing of brokers, weighmen and warehousemen, inspection of weights and measures, and trade allowances to be paid in all transactions in the market. The fees collected by the Committee would be spent on the maintenance of the Market, repair of buildings, payment of establishment charges etc. Only the trade allowances allowed by the Committee could be enforceable in a Court of law and deductions on account of Dharmadaya, Gorakhana etc. were prohibited and anyone making collections on that account would be "liable to a fine which may extend to fifty rupees for each offence." It was further laid down that no new market could be started within a specified radius of the regulated market without the sanction of the Government. If any Committee failed to perform its work efficiently it was liable to be superseded by the Government.

At present in Berar there are 31 regulated markets which deal in about 800,000 bales of raw cotton. Even with the increase in the number of these markets, a large proportion of the sales is carried on in the villages,

although ryots having more than one cart-load of cotton have been known to go 50 miles to sell it in a regulated market. Some markets attract brisk business due to their good reputation and growers get usually good prices due to keen competition among buyers. In some cases the rate of Ginning charges in the market also determine the amount of trade, as a high rate maintained by the combination of a small number of Ginning factories tends to scare away trade. Although open bidding is enjoined by the law it is not actually practised in many cases, due to the fact that it is unsuitable for ungraded cotton. The staff of an average Committee consists of the Daroga, two Clerks, Watchman, Conservancy men, fireengine men, and gardeners.

In the Bombay Presidency, the Bombay Cotton Markets Act (Act XVII of 1927) has made the establishment of regulated markets possible and one such has been established at Dhulia in West Khandesh. The following extract taken from a note on this cotton market prepared by the Director of Agriculture will give some idea of the benefits which the grower now derives from this market:—"The rates of each individual cotton cart are now made known to the owner, who formerly had no knowledge of such rates as the bargains between the agent who acted for him and the one who negotiated for the purchaser were in former times made under cover and were not declared to the owner of the cotton carts. There are now no unauthorised deductions or trade allowances, the contents of the carts being actually weighed and accounted for. Previous to the regulated market there was no control over the weights and cotton weighing less than a maund or fractions of a maund was not weighed and was unaccounted for." Through the efforts of the committee 175 disputes were settled in 1930 and 628 in 1931. Everyone in the market is aware now of the Bombay prices which are posted on the notice board daily and an attempt at the grading of cotton, particularly of the higher grades, has been started and admixture of sand or damping of cotton is being discouraged by the payment of a lower price. The monetary value of the gain which the ryot has derived from the regulation of this

market may be assessed at 4 to 10 annas per maund by way of better prices and lower trade allowances in addition to correct weighment and prompt despatch of business. The open bid system of sale has, however, not proved a success as (1) the cotton received in the market is not of uniform quality or classified into well-defined grades, (2) as the number of Adatyas is large, they bid for different lots at different places hence there is the risk of sales at different rates for the same quality on the same day, (3) where the grower has a number of carts to sell and there are many purchasers, it is difficult for him to attend the sale at all places at the same time.

The comparative success obtained in the regulation of cotton markets in the C.P. and Bombay has led to suggestions for the extension of this system in Northern India. Where the production of a particular commodity is not localised, it is not desirable to have regulation on the basis of specialised markets but general control over the marketing of all kinds of produce over a particular area will at least result in raising the level of marketing, and remove many of the common abuses, mal-practices which form a common feature in our unregulated markets. At Patna in Bihar, there are two important grain markes at Marufganj and Bakarganj, the former dealing in imported mill husked rice and the latter in locally grown rice. Both are unregulated and there is a wide disparity in the market practices of these two. The rate of trade allowances, the period of credit allowed to traders and the date of the closing of the annual accounts, to cite a few instances, are not the same and the arbitration performed by the so called Panchayats of these markets is not at all satisfactory. In such a case even a general regulation of the market by a recognised authority will prove very useful.

Although the regulation of markets in Berar leaves much room for improvement the fact that the grower makes a distinct saving by dealing in it is sufficient ground for the introduction of this system in a more improved form in other areas, particularly where a particular commodity is

more localised. Bengal affords ample opportunities for the development of a network of regulated markets. It is true that the holdings on which Jute is grown are very small and the Jute growing area is too scattered, but the smallness of the yield is counter balanced by the high yield per acre so that the per capita outturn compares very favourably with that of Cotton. Dr. J. C. Sinha very apply remarked that "the present marketing arrangments are chaotic, antiquated and prejudicial to the interests of the growers." The economic condition of the Jute grower can never be improved unless this state of things is improved and he is assured of correct weights, prompt payment and above all a square deal. The great importance of the grower's getting correct information of Calcutta prices, which can be diffused through a regulated market, will be realised from the following extract from the evidence of a Jute merchant of Narayanganj given before the Bengal Jute Committee:—"If the Calcutta price rises by one rupee, the tendency to raise the price at Narayanganj will be by 8 to 10 annas. On the other hand when the Narayanganj price rises by 8 annas the Beparis raise it only by 2 annas." It is true that the difficulties in organising regulated markets in Bengal are very great. In many areas in Eastern Bengal the Hats are held on boats or on the banks of rivers and it would be difficult to fix definite places for the weighment of Jute. The commodity is usually brought from long distances and it would be difficult to define the jurisdiction of the markets. The difficulties of transport also give a great impetus to village sales, but once these difficulties are surmounted and the grower gets the facilities in the market itself of correct weights, licensed warehouses and market information, village sales would in no time be replaced by market sales at least for the bigger growers. Market regulation in Bengal should be developed on the basis of special legislation. The local bodies, as we have seen in the Central Provinces, are not quite competent to undertake it, as on them the interest of the grower is not represented and these bodies, mainly interested in the financial aspect of the market administra-

tion, may act sometimes in such a way as to injure the interests of the growers themselves. Besides this different bodies may have different systems of management making uniformity an impossibility.

CHAPTER IV.

COMMODITY MARKETING.

In this chapter it is proposed to make a brief survey of the different stages of marketing through which some of our principal commodities like rice, wheat, cotton, jute, oilseeds, sugarcane, tobacco, fruits, etc. have to pass in their progress from the ryots, farm to the consuming and exporting points.

The marketing of paddy is not complicated by the existence of a long chain of middlemen and its production is mainly localised in Bengal, Bihar, Orissa and Madras Presidency. The relative importance of the acreage under rice in the three provinces is indicated by the following figures: —

Pcg. to total acreage sown in 1931.	
Bengal	.. 78.1
Bihar & Orissa	.. 46.7
Madras	.. 29.3

As it forms the staple food of the population, a large percentage is stored by the growers for their consumption and does not enter the market at any stage. Assuming an annual consumption of 3½ maunds per head, the Bihar and Orissa Banking Enquiry Committee have estimated that "the 22 millions of ordinary cultivators consume, without any marketing at all, 60 percent of the total quantity available. The rest of the rural population 10½ millions consume another 29 percent and this mostly goes no further than the rural markets which are held at places 6 miles apart" (p. 59). Thus practically 89 percent of the rice produced may be ignored for the purpose of marketing. Adopting this mode of calculation we find that in Bengal 72 percent and in Madras 89 percent of the rice produced are so consumed. In addition to this, these three provinces have heavy imports and exports as well. In 1918, Bihar

and Orissa exported 3.1 percent of her total rice production and about 8 percent moved away from the area of production, within or without the province. In Bihar and Orissa "the trade in rice or paddy that reaches the primary markets may be put in the neighbourhood of Rs. 20 crores, of which about 5½ crores go on to the big markets and perhaps Rs. 1 crore is railed or shipped out of the province.* After the threshing operations are over, the farmer has to set apart a portion of the paddy for making payments to the village labourers and artisans and also for the payment of the rent where it is payable in kind. Then he stores up the amount required by him for the consumption of the family and sells the balance in small or big lots as necessity demands. The bigger ryots try to hold up the produce so as to obtain better prices. Thus in the primary stage, the sale of rice is in driblets and is spread over several weeks. In those cases where the grower has taken advances with an obligation to sell at a stipulated rate he has to do so. In Orissa, the bigger Beparis usually give advances up to 25 percent of the value of the expected supply in November for delivery in February next. Where the prices are fixed beforehand no interest is charged but where delivery is to be at market rates the usual rate of interest varies from 12 to 8 3/4 percent. In the seacoast regions of Orissa, short-period loans given by Mahajans are repayable in paddy after the harvest, and the price given is usually 2 annas per maund lower than the market rate. "The ryot who repays a loan in paddy at the threshing-floor measured by the creditor and charged up at threshing-floor prices with charges for measuring, a little for charity, and a littie for deity gets very little for the trouble he has taken to cultivate his land and has thus no inducement to put more in his hand."† The bigger ryots not only hold up their produce, but where, as in the Godavari Delta, they carry on trade on a small scale on their own account, they borrow at a low rate of interest against the security of their paddy and buy more paddy at harvest prices with a view to store them till atleast

*Report of the B. & O. Banking Enquiry Committee, p. 59.
†Report of the Madras Banking Enquiry Committee, p. 107.

September when the market is usually very brisk, those who are free from debt, of course, have ample scope to sell at the best market possible.

The purchase of paddy is usually made by Beparis or Paikars in the villages or the Goladars, Aratdars at important Hats and markets. In Assam, Beparis from Bengal go up with their boats when the rivers rise and Marwari traders who have their godowns near railway stations purchase there from ryots who bring their produce on pack ponies. In Eastern Bengal the Beparis collect the paddy from villages and Hats and supply to the husking firms at big centres of the rice trade like Angaria, Chamta, Neamati and Jhalkati, after which the husked rice is despatched to the Aratdars in Calcutta. In Bihar ryots also sell through Goladars who give them an advance up to 75 percent of the value of paddy deposited with them and charge 7 to 9 percent interest. The owner of the paddy gives some instructions about the rate at which the paddy is to be sold and if the Goladar can sell at higher rates, he takes the profit. His advances are made against book entries and repayments are likewise noted and interest is charged on daily balances. In the Kistna rice region of Madras the ryots or petty traders take the produce on carts direct to the mills or to the Khaida merchants in the town. These merchants act as commission agents and arrange for the sale of the paddy to mills who sell it to the exporters. The Khaida merchants' charges include commission at one anna per bag, kolagaram or charge for weighing at Re. 1 for 25 bags, Dharmam or charity at 4 annas percent, the fee for the merchant's clerk at 4 annas percent, interest and godown rent. In many cases the mill-owners send out their own men or employ commission agents or Beparis directly. In Nellore the Dalals of the mills are paid commission at the rate of rupee one per putti of 720 Madras measures.

At the exporting point, the exporters buy from the Aratdars or mills and the Beparis or the mofussil traders are completely in the clutches of the Aratdars. The bigger exporters despatch direct to the foreign ports and make

their realisation through exchange banks but the smaller exporters carrying on coasting trade draw Hundis on the consignee and get them discounted by local banks.

Among the wheat growing provinces of India, the Punjab and the U.P. among themselves account for about 70 per cent of the total acreage while Bombay Presidency has 8 percent and Bihar and Orissa 4 per cent. In the Punjab the gross value of wheat produced annually varies from 27 crores of Rupees to 35 crores. Although wheat is widely consumed in Northern India, it is usual for the poorer classes to substitute millets, maize and other inferior food grains for it in their consumption from September to March and peas, barley and gram in summer so as to make a larger proportion of wheat available for marketing. To illustrate this the following figures of consumption scale of different groups of people of the village Gijhi, (District Rohatak) Punjab may be cited:—

Scale of consumption (per month in seers).
Well-to-do landowners and tenants.

Person.	Cereal.	Wheat.	Gram.	Bajra.
Below 5 yrs.	7½	5	2½	6
5—10	15	11	4	12
10—15	16	11	5	13
15—25	25	19	6	21
Over 55	13	10	3	10

Small landowners and tenants.

Below 5 yrs.	7½	3½	4	6
5—10	15	7½	7½	12
10—15	18	9	9	14
15—25	30	15	15	24
Over 55	13	6	7	10

Agricultural labourers.

Person.	Cereal.	Wheat.	Gram.	Bajra.
Below 5 yrs.	8	1½	7½	7½
5—10	15	1	14	14
10—15	15	1	14	14
15—25	30	3	27	28
Over 55	13	1	12	12

In village Nuggal, District Ambala the total requirement for consumption is 3185 maunds and the total average yield of wheat, gram, rice, and maize is about 2073 maunds, thus there is a deficiet of 1112 maunds, yet this village exports wheat and gram and imports for consumption maize, paddy, and pulses. The gradual increase in the Punjab and Central Provinces and in the eastern portion of the U. P. of the rice acreage between 1925 and 1935 with a simultaneous rise in the wheat area and the decline in some other valuable crops as bajra (millet) or pulses possibly points to a tendency of rice entering more largely in to the diet of the people of these provinces setting free larger volumes of wheat for trade.

The following figures give an estimate of the consumption of wheat in India :—

Amount (Tons.)	1909—1914.	1924—1929
Produced in India	9,570,000	8,567,000
Imported into India	1,118,000	142,000
Exported from India	1,308,000	383,000

Thus even making allowance for the marked decline in production due to bad weather conditions the balance available for consumption within the country was in the post-war period higher by 63,000 tons. From the figures of production of wheat in Punjab, as stated by the Punjab Banking Enquiry Committee we find that the balance available for consumption has also increased considerably. "Another

significant feature is that, whereas in the earlier period the wheat imported from Karachi was equivalent to 90 per cent of the total amount exported from the Punjab, in the latter it was only 59 per cent. In other words not only does the internal consumption of wheat appear to be increasing in the Punjab, but a larger proportion of its surplus seems to be going to other parts of India".* In the Delhi Province about 45 per cent of the wheat produced is marketed as the following figures taken from the Delhi and N.W.F.P. Banking Enquiry Report will show: —

Name of village.	Quantity of grain produced. Mds.	Quantity kept at home. Mds.	Percentage.
Jhangola	1474	315	21
Akbarpur Majra.	1346	1062	76
Muhammadpur Majri	5348	3344	62
Jafarpur Kalan.	6738	2951	43
Jonapur	7431	2274	28

Thus unlike rice, wheat is of greater importance from the marketing point of view as it not only enters more largely into the inter-district and inter-provincial trade but the export trade is also not inconsiderable. In 1931 the Calcutta port imported 80,576 tons of mostly Australian wheat valued at Rs. 49 lakhs while Karachi imported 7,932 tons valued at Rs. 5 lakhs and exported Punjab wheat amounting to 18,664 tons valued at Rs. 11,78,283. There is no doubt that the great bulk of wheat is exchanged within the area of production. In the pre-war period which were years of good harvest, the export of wheat out of the Punjab, the U.P., the C.P. and Bihar and Orissa averaged only 60 million bushels per year or about 20 per cent of the average crop, and out of this 76.6 per cent was exported out of India.

*Report of the Punjab Banking Enquiry Committee, p. 63.

About one-third of the wheat sold by the growers goes to the Mahajan who has either advanced them on the pledge of the crop or has a hold on them arising out of other forms of loan, e.g., mortgage, pawns etc. Even when the Mahajan pays him at village rates, he realises the Mandi kharcha or the charges payable when sold in the market and the cost of transport. The village grocer usually buys cash and sells at the next market and as his margin is not wide enough he tries to cheat in weighing. He sells usually to a town grocer or Arhti with whom he has business connection as he gets from him favourable commission rates and thus he makes profits at the rate of 7 per cent on the transaction. The village Kumhar, the Bepari and the Banjaras in the U.P. buy from the growers in the villages and move the produce to the markets. In the Punjab, the Arhti of any big market sends Beparis or Agents round the villages. They interview the village Dharwai, who is weighman cum broker and secure information about the owners who are likely to sell their wheat. The Dharwai and the agent discuss and fix up the rate to be paid and if the grower accepts it, the bargain is struck, which is signified by the payment of rupee one. After this the grain is weighed out by the Dharwai and cash payment is made to the farmer before the commodity is removed. In the Central Provinces the Beparis have no capital of their own and they have a cash credit account with the Adatya for short periods usually without interest provided they can supply the stipulated quantities of the grain. The bigger farmers in U.P. sometimes bring their own produce on carts to the large markets and they are usually met some miles away by the servants of the Arthi who try to persuade them to come and sell in their own Arhats. In these mandis the grain is inspected by brokers and buyers after which in some cases, the produce is put up to open auction or the rate is fixed "under the cloth" and deductions due to the presence of dirt are settled, after which payment is made, but in doing so, the mandi charges and the remuneration of the middlemen are deducted. In selling in small Mandis, the grower's marketing expenses are high as they include

the Mandi charges of the market where he is actually selling and the Mandi charges of the market where his purchaser will sell. If a grower sells directly in the Hapur market his charges amount to Rs. 2-9 per cent but if he sells through a small mandi he has to pay 163 per cent more. Ignorance of market conditions, risk of delay in bigger markets and difficulties in transport often stand in the way of the grower's making this saving in cost by selling in the bigger markets.

In the bigger mandis the farmers or small dealers arrive at the shops of katcha Artis early in the morning. The pakka Arhtis or their brokers come there and inspect the goods after which each cart-load is sold separately by open bids. The seller Arhti settles the karda deduction or allowence for dirt which is ordinarily ¼ seer per maund. The buyer may make the payment on the same day or on the third day but in any case the katcha Arhti has to pay the grower the whole or a part of it at once. If the grower does not accept the rate of the karda deduction, the wheat is to be sieved and he has to pay at the rate of ½ chhatak per maund as charge for sieving, hence he has to accept whatever rate of deduction is settled. The cart-load is then taken to the enclosure of the pakka Arhti where it is weighed and stored. In course of the weighment in many cases the buyer tries to raise the rate of Karda deduction on the ground that the quality is not uniform and as the transaction has proceeded far enough for the grower to back out, hence he has to agree to it. In the Central Provinces, in place of the open bid, wherever the Hat system of sale is prevalent, the ryot is often defrauded by Arthi and this system "tends to perpetuate the monopoly of the merchants in the matter of buying in the market."

The next step is either to store the wheat in Khattis to take advantage of a rise in price or to sell to agents of exporting firms or to merchants of other provinces. When a Khatti or Kotha or storage chamber is filled, its Parcha or slip giving details of quantity and value. is made over to the Bank, which after scrutiny lends up to 75 per cent of

the value stored and formally takes possession of the Khatti. In cases of despatch to other centres the merchants are given an advance up to 90 per cent of the value of the consignment on their endorsing the Railway Receipt in the name of the Bank along with a Darshani Hundi drawn by the sender against the consignee. In many markets the consignors usually consign to themselves while despatching goods, so as to raise on the bill of lading an advance without difficulty from his Bank and to safeguard against any risk arising out of the inability of the purchasing firm to pay. The Bank sends the bill with the Hundi to its branch or to some other Bank in the market to which the goods have been consigned. When the purchasing firm honours (Sekar) the hundi, the railway receipt is endorsed in its name and it can take delivery. In course of its transit from the big upcountry market to the point of shipment. the wheat is burdened with various charges which include transport from market to the railway station, porterage, railway freight unloading at the port station and loading in ships, charges from F.O.R. to F.O.B. and charges subsequent to shipment including freight, insurance etc.

As we proceed from wheat to cotton, the marketing organisation becomes gradually more complicated and the number of the middlemen increases. The commodity is not marketed in the shape in which it is produced and several processes are required to make it marketable. The acreage under cotton in British India gradually rose between 1903 to 1931 by about 3.5 per cent but due to continued slump in the cotton mill industry and consequent low prices of raw cotton the acreage in the Indian Empire in 1934 fell by 5 million acres and the production declined by 1½ million bales.

Unlike wheat and paddy, cotton cultivation is more widely distributed all over India, almost all the important provinces have fairly considerable areas under it. In 1933 Bombay contributed 28.5 per cent of the total raw cotton produced in India and the corresponding figures for the Punjab are 24.4, C.P. 14.3, Madras 8.1, the U.P. 3.8, Hydera-

bad 10.1, Central India 3.6, Burma 2.1, Baroda 1.8, Gwalior 1.2 and Rajputana 1.3 per cent. In 1927 raw cotton accounted for 12 per cent of the total gross value of agricultural produce in the Madras Presidency and 10 per cent in the Punjab. Due to this wide distribution of the cotton growing area and localisation of the cotton mill industry in a few centres in recent years, the amount of movement to which cotton is put to, is considerable, and the inter-provincial and inter-district trade in raw cotton has assumed great proportions. Over the important Railways in India, 1070 million tons of cotton, both raw and manufactured were carried in 1933 as against 1046 millions tons in 1932. In our foreign trade too raw cotton figures very prominently as in 1933-34 our exports of raw cotton were 18.4 per cent of the total export trade in merchandise and the value of this was Rs. 26,97,67,000. The following figures will give some idea about the direction of our export trade in raw cotton :—

Percentage of total exports of raw cotton (1933-34).

United Kingdom	..	..	11.2
Japan	..	..	37.0
Italy	..	..	7.3
France	..	..	5.8
China	..	..	11.0
Belgium	..	..	5.1
Germany	..	..	7.2

The chain of the marketing of raw cotton may thus be illustrated ;—

COTTON GROWER

I

I	I	I
Village Dealer.	Agent of Exporter	Village Mahajan.
I	or Mill.	I
I	I	I
Mandi or Market.	Ginning Factory	Itinerant Dealer.
I	or	I
Ginning Factory.	Exporter, Mill.	Adatya of Market.
I		I
Commission Agent		Commission Agent
at the Port or		I
Mill centre.		I
I		Exporter or Mill.
I		

I	I
I	I
Exporter.	Mill Buyer.

Thus the course of marketing starts with the grower and through diverse channels it proceeds till it converges on the exporter or Mill buyer. As a rule, the grower sells in the form of Kapas or seed cotton and in North Gujrat bolls (Kallas) are also sold while in South Gujrat, many well-to-do farmers sell after ginning the cotton. The grower sells a large proportion of the cotton in the village itself to the village Sowcar or Mahajan, village dealers, agents of mills or ginning factories. In many cases the Mahajan gives an advance on the standing crop on the stipulation of sale at a lower rate, which may be Rs. 30 to 100 per Khandi below the prevailing rate. Except in the case of very poor ryots this hold of the Mahajan is not so serious as it may appear to be, as besides the Mahajan he has other sources of credit and he can borrow from them and repay the sowcar or pledge the cotton with an Adatya and raise funds on it. The investigation conducted by the Indian Cotton Com-

mittee in the Adoni and Nandyal Taluks of the Bellary and Kurnool districts show that 70 per cent of the cotton growers had borrowed at the commencement of the cultivation season and the average loan per acre was Rs. 12.4 and the value of the average-yield per acre was Rs. 26.2 thus the rough index of borrowing was 47, yet even in this area cultivators in general were not hampered by borrowings in the disposal of their "Kapas". One of the reasons for the indebtedness of the farmer and his inability to hold up the crop is that he has in some provinces to make payment of his land revenue assesment before his cotton crop is ready. The Indian Cotton Committee have pointed out that the dates on which the instalments of land revenue fall due are, in all cases, suitable except in Bombay Presidency exclusive of Sind, where in villages in which the principal crops are the cold weather crops, the dates of instalments have been fixed as the 5th February and 5th April. In none of the cotton growing districts of Bombay, except Khandesh, where cotton is a hot weather crop, is any crop ready for marketing by the 5th February. "In an enquiry into wheat marketing in the Punjab it was found however that among the reasons for the early disposal of the crop by the growers, payment of land revenue accounted for 51 p.c. and payment of debt 30 p.c. The amount of produce sold in the village itself in some form or other varies in different areas. In Sind the percentage is pretty high being 79 per cent due mainly to the comparative need of the people and their tendency for speculation in cotton prices. In Khandesh the percentage of village sale is higher viz. 81.4 and in Central Gujrat it is rather low (51 per cent) and in Karnatak 70. In the Dhollera area of Northern Gujrat the farmer usually has a running account with the village Sowcar and markets through him, yet the pencentage of village sales is only 52 per cent. In Berar with its well organised system of cotton markets managed by market committees, the amount sold in the villages is far below

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*Wheat Prices in India by A. Hamid, Agriculture and Livestock in India Vol. V, p. 256.

that sold in these markets, the percentage of the former being 32 and that of the letter 68.

The respective percentages of village and market sales may be tabulated thus:—

		Village sale.	Market sale.
Khandesh	..	81.4	18.6
Middle Gujrat	..	51.0	49.0
Sind	..	79.0	21.0
Punjab	..	80.5	19.5
Madras	..	87.0	13.0

Various factors have combined to make the village sale popular. The growers have not much familiarity with the market conditions and they fall an easy prey to the machinations and subterfuges of the middlemen and their satellites. Kapas is rarely sold in these markets by open bids but mainly by the "Hatta" syetem. The official market rate which is posted on the market is rarely effective as due to his weak bargaining power the grower is compelled to accept any terms he gets and also to agree to any amount of deductions under various pretexts. The weighing at the Ginning factories is not always very fair and the very brokers whom he employs and pays for are not always honest. Thus the grower finds it on the whole more remunerative to sell in his village where he can look after his cultivation also. Besides this, the rates offered in the villages compare very favourably with those prevailing in the markets. In Sind, the Ginning factories have their own paid agents in the villages who are in some cases also the village money-lenders and they receive daily instructions about buying rates from the factories, thus a close correspondence is maintained between the market and the village rates, e.g., the normal rates in the villages was Rs. 13 per maund of 42 seers between October and January while the market rates were as follows:—

Nawabsah	Rs. 12-13 to Rs. 13	on 3-12-27.
Tando Adam	Rs. 12-15 to Rs. 13	on 6-12-27.
Mirpurkhas	Rs. 12-10	on 21-1-28.

In middle Gujrat, the same similarity is also noticeable.

	Village sale.		Market sale.	
	Early.	Late.	Early.	Late.
Barodaprant	Rs. 7-8	Rs. 7	Rs. 7 to 8	Rs. 6¾ to 7¼
Panchmahals	Rs. 7	Rs. 7	Rs. 6¾ to 7¼	Rs. 6¾ to 7½

"In a few cases, particularly in Madras, the village rates were even better than the rates current in the market. The explanation for this phenomenon is to be found in the anxiety of village traders to fulfill their forward contracts within the stipulated time."*

When the itinerant dealers or village sowkars bring the produce on their carts to the cotton market, they go to the shop of the Adatya with whom they have business dealings. The buyers go round the market inspecting the quantity and quality of the arrivals and meet the Adatyas with a view to discuss and settle the local rate of the day on the basis of the telegraphic communication about Bombay rates. The Adatyas on behalf of their clients accept these rates and proceed to despatch to the compounds of the Cotton Gin the number of carts required. The grower has very little say in this transaction. In the Ginning factory the cotton is weighed on beam or platform scales. When the 'dokra" or gunnybag into which kapas or cotton-seed is packed in the South Marahatta country is opened, disputes often arise about the lack of uniformity in the quality and consequent increase in the deductions is made. In the Punjab this deduction is called "Watta" and is realised not only for lack of uniformity of quality but also for the damping of cotton or its adulteration with earth or sand or country cotton being mixed with American. In many cases these are therefore perfectly legitimate while in others no

*Report on Eight Investigations into Finance and Marketing of Cultivator's Cotton, p. 28.

doubt the grower's weakness is exploited fully. An investigation into it in village Chichawatni in the Montgomery District of the Punjab shows that Watta was deducted in 40 per cent of the sales at rates varying from one to twenty annas per maund and in the local co-operative commission sale shop it was deducted in only 12 per cent of sales and at rates as low as one to eight annas. In the Bellary markets the produce is stored in the godowns by the Dalal at the risk of the seller and sometimes there may be a delay of some months for the sale to be effected. In Adoni on the other hand, the sale takes place on the same day, and the producer-seller and the buyer have a chance of meeting one another and settling terms and the seller gets ready cash, the role of the Dalal being to secure customers and to look after the weighing and deductions. When there is a prospect of rise in prices the Bellary system is better as the produce is stored in the godowns for any period. The Dalal usually pays the grower less than the current price and takes commission from both parties and divides with the buyer cotton taken by way of sample. In the Coimbatore District many gin factories employ their own men who buy direct from the growers. In the Central Provinces, the Arhtis working in the markets have to take out a license from the municipality or market authorities. The Arhtis of the Central Provinces are pure commission agents as they act as brokers and effect sales, but the Berar Arhtis very often trade on their own account. To cite a typical example, the Yeotmal Cotton market commences its official season from the first week of October. The arrivals during the year vary from 28,000 to 48,000 carts, the highest number of carts arriving on any day in 1931 being 1400. There are 55 Adatyas holding a licence from the committee. Sales are made by open auction and the Adatya gets 12 annas per Khandi (or one cart-load) as his commission and the total market charges which are levied on the cart-load amount to about Rs. 2/3 including Adat charges, weighing, charity, Cotton market cess, Hamali or porterage for drawing carts on the scales etc.

The Hubli market is the largest in the Kumpta Dharwar area and the annual turnover in it is about one lakh bales of raw cotton. Though the market is located close to the railway station the area is so small that there is little room for the parking of carts and also where the cattle may take rest, although the produce comes to it from a wide area by road and railway. There are no covered sheds and the "Dokras" lie unprotected. There is a wide difference in weights used in this and the neighbouring markets, e.g., at Hubli sale is on the basis of 1 Nag.=1344 lbs. of Kapas and one Nag. of cotton lint—336 lbs. but at the Bagalkot market the basis is of one Nag—200 lbs. Annigeri has a Nag of 1456 lbs., Bail Hogal 448 lbs. etc.

The Ginning factories are a necessary link in the chain between producers and consumers as on the proper ginning of the seed cotton much of the value at the exporting or manufacturing end depends. The cost of ginning is important for the producer as the buyers in quoting prices take into consideration the ginning and pressing charges. In these factories barring a few, single and double roller gins are used although the use of saw gins would enable them to turn out a cleaner class of cotton and save much manual labour as they are fitted with a suction feeding arrangement for Kapas and an exhaust delivery of lint in a condenser form. These ginning factories have in many cases formed themselves into pools, which lay down an uniform charge for ginning and pressing for all factories and a fixed percentage of this charge sufficient to cover the actual cost is retained and the balance is paid into the pool to be divided at the close of the season on a pro rata basis among the members. This combination among these gin owners has no doubt safeguarded their position but have forced up charges very much to the cost of the cotton growers. In Nagpur, for example, "Under pool the charges for ginning this year is Rs. 6-13-3 per Bojha of 392 lbs. out of which about Rs. 1-12 has to be paid into the pool and this ultimately comes out of the pockets of the cultivators."* In the Punjab

*Evidence of Messrs. Volkart Bros., Ltd. before the Indian Cotton Committee, Vol. IV.

everyone who buys Kapas has to pay in addition to the usual rate for ginning a contribution of -/4/- to -/8/- annas per maund of Kapas into the pool. The difference in the charges in pool and non-pool regions often is from Rs. 4 to Rs. 6 per bale. These gins are responsible to a large extent for the quality of the cotton lint and unfortunately uncontrolled ginning has been the source of many abuses in the past which have induced the Government to check them by legislation. The damping of cotton is sometimes done intentionally by the grower but more often it is the doing of the middleman. The Indian Cotton Committee have remarked that "the malpractices for which the cultivator and the village Bania are responsible are of minor importance compared with those which are carried on in ginning and pressing factories". Some of these are due to defective methods of working while others are deliberate. To cite a few instances, cotton is mixed with mill-waste, good cotton is mixed with rain-soiled cotton, various varieties of cotton are deliberately mixed up. The crushed seed is allowed to enter into ginned cotton to increase the weight. Due to the floor of the factories not being paved and there being a general lack of cleanliness, the admixture of dirt is the least of the evils of our ginning factories. The Cotton Transport Act of 1923 and the Cotton Ginning and Factories Act of 1925 have been passed to control these factories and to combat these evils.

In the export trade, many exporting firms contract with the ginning firms or big Adatyas for the supply of a fixed number of bales of lint of a particular quality and if the lint falls below the standard, and is rejected, no ginning charges are paid. In Tuticorin the exporter makes a contract with a dealer for the supply of lint. The dealer makes his purchases in a Pettah or market from growers through the agency of a Tharagan or Commission Agent and makes over the Kapas to the exporter's, ginning factory to be ginned for him and at his cost, the seed being returned to him and the lint taken against the contract made. This ensures to the exporter proper ginning as well as good qualtiy of the

cotton. An improvement upon this system has recently been introduced by which the dealer in order to keep up his contract makes a covering contract for lint with sub-dealers who buy Kapas outright from growers and deliver them direct to the exporter's ginning factory on the sub-dealer's account and this in turn is credited in the farm's books as lint supplied by the dealer against his contract. This system, by ensuring delivery of the Kapas from the grower direct to the exporter, avoids the risks of admixture and adulteration which are common features in cotton markets. When cotton is despatched to an exporting point, e.g., Bombay, the railway receipt is made over to the Mukaddam or carting agent who clears the cotton from the station and transports it to the Cotton Green or to ware-houses, his charges being 8 annas to 12 annas for carting. After this the regular Mukaddams or shippers take charge and they weigh, pile and give delivery to the buyers, charging for their services about Rs. 2 per Khandi. When the cotton is intended for export, it has to be weighed and marked and transported to the docks for shipment or it may have to be stored on the Cotton Green if shipment is not available atonce.

It may be of interest, in passing, to describe briefly the system of cotton marketing in the U. S. A. There the grower takes the cotton to the nearest gin for getting it ginned and baled after which it is transported to the nearest trading centre for sale. The country merchant cuts a hole into the side of the bale to get a sample and to find out its grade and makes his offer accordingly. Next he despatches it to bigger cotton markets or the port directly when it is graded according to established standards. Brokers acting on behalf of Spinning Mills and exporting firms examine the samples and offer prices based on information of the world market. If the cotton is bought by an exporting firm, it is sent to the baling house before it is shipped. "In recent years the producers in many places and states have been forming Co-operative Selling Associations which are performing the function of local buyers as well as those of the dealers in the concentration points. These Associations are now providing for the ware-housing, grading and classing

of the cotton into lots of similar quality so as to be able to deal directly with the spinners, brokers and exporters."

In Jute, India has a world monopoly although in recent years, competetive forces have been at work all the world over which may have serious consequences for the Jute industry of India. Due to long continued trade depression, the attention of many countries has been concentrated on the lowering of the cost of production and in the finding out of cheaper substitutes for Jute in the packing and storage of merchandise. In the United Kingdom, Australia and South Africa the use of paper bags in major industries as well as in retail trade is on the increase. In Denmark 80 per cent, in U.S.A. 40 per cent of the cement produced is packed in paper bags. The annual consumption of bags in the cement trade of South Africa is about 3 millions and the tendency is towards a substitution of Jute bags by paper. The use of cotton bags in U.S.A. is on the increase due to the fact that "the diminished demand for cotton has stimulated American cotton interests to take active steps to foster the adoption of the cotton bags and bagging in preference to Jute both internally and in foreign markets." The adoption of bulk handling of grain in the U.S.A. and Australia on a large scale is reducing the demand for Jute packing and this movement is fast expanding. Recently the Argentine Government have sanctioned the construction of a long chain of grain elevators. East African and Mexican sisal may in the near future prove a good substitute. Whatever the future may have in store, with Jute cultivation is bound up closely the economic life of 3 millions of small farmers in Bengal, Assam and Eastern Bihar. The total acreage under Jute in these provinces increased from 19,99,000 to 34,85,000 in 1930 and then declined to 21,43,000 in 1932 and as the result of the Jute Restriction Scheme inaugurated by the Government has further declined in 1935.

Jute is produced by unorganised growers over a vast extent in Eastern and Northern Bengal, Assam and the eastern districts of Bihar. In Bengal, Jute accounted for

*Boyle—Marketing of Agricultural Products, p. 291.

10.7 per cent of the gross cultivated area in 1921-30 as against 72.5 per cent of rice. Its importance from the marketing point of view will become apparent when we consider that the annual value obtained by growers by the sale of Jute between 1920 and 1930 amounted to Rs. 35 crores as against Rs. 20 crores for food-grains actually marketed. Mr. D. P. Khaitan's estimate of the value of marketable crops in Bengal gives the following interesting analysis:—

Year.	Value of Jute crop at market prices. (Crores of rupees).	Percentage of the value of Jute crop to the total value of marketable crops.
1920	15.74	25
1922	23.73	31
1924	42.99	58
1926	43.67	68
1927	36.92	85
1929	36.76	52
1932	8.62	26

During the decade 1920-30 Jute accounted for about 48 per cent of the total value of marketable crops in Bengal and even with the unprecedented fall in prices in 1932 it represented 26 per cent of the total crop value. Its importance from the point of view of marketing is much greater than that of rice or wheat. The cultivation of Jute is scattered over a wide area but its manufacture is concentrated within a very short radius round the ports of Calcutta from where the exports also take place. The following table shows how the raw Jute is utilised:—

	Percentage to total production.	
Year.	Consumed in India.	Exported.
1913-1917	65.1	34.9
1918-1922	65.8	34.2
1928-1929	57.6	42.4
1932-1933	59.7	41.3

Thus home consumption and export are not far from one another in importance. In 1933-34 Jute accounted for 22 per cent of the total exports of India as against Cotton raw and manufactured 20.2, Tea 13.5, Oilseeds 9.3 and Grain 8.0. The course of marketing therefore means the collection of small parcels of Jute from the grower's villages in areas where the means of communication is quite undeveloped and leading them through various courses to Calcutta and its neighbourhood either for export or for being manufactured in 94 Jute Mills equipped with 60,000 looms. The following may be taken to represent the chain of marketing of Jute in Bengal.

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                              Grower
                                I
     ---------------------------------------------------------
     I              I                I                I
   Faria          Bepari          Aratdar          Mahajan
     I              I                I                I
     I  -----------------            I                I
     I   I              I            I                I
     I Aratdar      Mahajan          I                I
     I                 I             I                I
     I                 ------------------------------------
     I                               I
  Calcutta                      Kutcha Baler
  Aratdar                            I
                           ------------------------
                           I                      I
                      Pukka Baler           Calcutta Mills
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Eastern and Northern Bengal, where the major portion of the Jute is grown, is intersected by a network of rivers and channels and vast areas are approachable by boats alone during the best part of the year. Hence the main task of assembling the commodity lies with the middleman at it is not always possible for the grower to market it himself. The grower cannot hold up the crop for any length of time as it is difficult for him to arrange for its storage in his thatched house as it is liable to get burnt. The fibre has a

tendency to deteriorate in colour and strength if it is not completely dry before it is stored. Further by the time the Jute is ready for marketing, the river routes are all open and transport by boat is much cheaper than sending it on carts.

The first link in the chain is supplied by Farias and Beparis. The Faria buys from the grower at his home or at the nearest "Hat" and sells to the Bepari, who in his turn sells to the Aratdar or Mahajan. The grower may also sell direct to the small Aratdars or Mahajans. Usually the Bepari works on behalf of a Kutcha Baler or Aratdar who may lend him funds for making advances to the grower, if required. In these cases, advances are given at sowing on the crop on 'Sattapatras' with the stipulation of delivering the stipulated quantity by a fixed date in repayment of the loan. The Bepari gets instructions from the Aratdar about the price he is to offer and where he works in commission, his remuneration is 9 pies in the maund and if he works on his own, he has to purchase within the rate fixed by the Aratdar and if the market is not favourable he takes recourse to unfair means to keep a fair rate of profit for him. These malpractices include cheating in weighment, watering the Jute and strewing sand on it to conceal the moisture and placing a lump of earth or a piece of stone inside a tight bundle of loose Jute with a view to enhance its weight. The grower is not in touch with the big merchant and has no information about the trend of world markets, he "lives in an atmosphere of darkness, ignorance and helplessness," hence he falls an easy prey to the exploitation of the Faria or Bepari.

The next links in the chain are the Aratdar and the Kutcha Baler. The Aratdar has no important function to perform in storage as his confrere in the wheat or paddy trade does. In fact as Dr. H. Sinha has pointed out* "strictly speaking there are no Aratdars in the Mufussil as their godowns are very small and they have to arrange for

*Dr. H. Sinha—Muffassil Marketing of Jute (Ind. Econ. Journal, Dec. 1929).

agents for the Mufassil traders. On delivery at the Arat, little capital of his own and he advances money to the Beparis with funds borrowed from guarantee brokers or balers and he is very useful in the collection of Jute from the villagers. "When the fibre is ready, buyers of Jute make ready their own arrangements. An auspicious day, usually the Rathjatra day is chosen for the inauguration. The Aratdar sits in state with his scale liberally smeared with vermillion paste. The Beparies and others attend the feast and the religious ceremony held in this connection."

Jute may be sold as Pucca Bale, Katcha Bale, Bojha and loose Jute. The Pucca Bale is always intended for export and this Jute is "cut", i.e., the root is cut off before baling. This Jute is classified according to five grades based on strength, colour and quality. Most of the Pucca baling work is done in Calcutta. The loose Jute is consumed to some extent in the interior in the manufacture of rope etc. The Kutcha baling house in the Moffusil is well-equipped with the requisite machinery. The Jute is classified according to the standards laid down by the buyers in Calcutta before it is pressed and baled. The Kutcha bales are lighter in weight than the pucca for facility in handling. It has four sections :—(a) Importing Shed where the incoming Jute is weighed by Koylies or weighmen, (b) The Assorting Shed is under an Assorting Master who supervises the work of sorting and baling done by Khatawalas or contractors who receive remuneration at a rate varying from six annas to ten annas per bale. All bales are marked with signs denoting quality.

The allowance payable by the seller include (1) "Excess" which is ordinarily one seer in the maund,—a reminiscence of an old custom of delivering 103 maunds against an order for 100 maunds, (2) Sample—2 chattaks per maund, (3) Kabari—1/5 seer per maund, (4) Bachhat—1/5 seer per maund, (5) Dhalta—allowance for dryage varying according to the condition in which the commodity is sold, (6) Muthi—one seer in 10 maunds. Thus these amount to about 4

maunds on a sale of 100 maunds of Jute—certainly not a negligible amount.

Of the Jute despatched to Calcutta, railways carry about one-half while steamers account for 45 per cent, country-boats 4 per cent and carts one per cent. About 20 per cent of this comes as loose Jute to the seven loose Jute Arats of Calcutta, viz. Hatkhola, Phulbagan, Chitpore, Baghbazar, Ultadanga and Cossipore, each of which specialises in Jute grown in particular localities. Except Cossipore, all these centres have godowns while at Cossipore the Aratdars are pure commission agents as they act as brokers for the Beparis of the interior and arrange with Calcutta buyers for the sale of the goods without removing them from the railway warehouses. At Cossipore goods are allowed to be kept with the railway free of charge for a day and after that, if they are not taken delivery of, a demurrage at the rate of 3 pies per maund for the next 24 hours and at one anna per day. following is charged. The price is fixed provisionally there and deductions or Batta are made later on at the time of weighment on delivery if the quality differs from the sample. At the other centres the Aratdars act also as traders on their own account besides being commission agents for the Mufussil traders. On delivery at the Arat, he makes an advance varying from 60 to 85 per cent of the value to the agent of the Bepari or the money is remitted by Insured post. The period of making final payment varies from 3 days at Shambazar to 8 days at Phulbagan. Weighment for the sales made at Cossipore is done in the press-house of the balers but in the Hatkhola market Jute is weighed in the warehouse of the Aratdar. At Cossipore, deduction on account of Dhalta is as high as one seer per bale of 3 1/2 maunds which is not allowed in other centres and the other terms are on the whole better there, hence Cossipore is becoming popular day by day, and balers go to Hatkhola when the price of Jute there is atleast 2 annas per maund lower. Cossipore has become practically an auction market where Jute is sold to the highest bidder and when the market is rising the trade here is very brisk. "Two systems of commission are in vogue, one followed by

non-Bengali and the other by Bengali Aratdars."* The former have a flat rate of six annas per maund for Kutcha and seven annas per maund for pukka transactions. The first signifies that there is no liability on the part of the Aratdar if the buyer defaults in the payment of the purchase money while under the latter, the Aratdar undertakes full liability for payment. On arrival at the Arat, the buyer with his Dalal inspects the consignments and the Aratdar's Bechwal or salesman shows them different samples, which being approved, the price is settled "under the cloth". Then the buyer who is usually a baler, removes the Jute to a presshouse for assortment and rebaling into pukka bales for export. The baler in many cases is also a shipper and where he is not, he supplies according to the directions of the shipper and he has to give a written assurance called the Home Guarantee to the effect that the Jute supplied is according to the standard required by the foreign buyer. If there is any dispute and on arbitration the award is against the shipper the baler is liable for damages. In these contracts under the "Invoicing Back" clause, if the quality differs so much from the standard as to be unusable, it may be refused altogether. The arbitrations in the export trade are carried on by the Dundee Chamber of Commerce in the case of higher qualities of the fibre and for others by the London Jute Association. When Jute is exported to continent of Europe through London it is governed by the terms of the London Contract, but when the export is direct from India the terms are almost similar to those of the London Contract except the Arbitration clause. In such cases the Arbitration is done according to the system in vogue at the port of arrival. Jute is exported to Japan and U.S.A. according to the terms of the London Contract and the Arbitration is performed by London.

The Kucha bales, weighing about 4 maunds each, are delivered directly into the Jute mills, who make their purchases from the baling firms in the interior through their

*Dr. H. Sinha—Marketing of Jute in Calcutta (Indian Journal of Econ., Jan. 1929).

Brokers. These purchases are usually on forward contracts of a month or months and the brokerage paid does not exceed 1¼ per cent. Where the broker has no personal liability he gets one per cent, but where he is responsible for the due performance of the contract, he gets 1¼ per cent. Usually full payment is made on the production of the bill of loading but in many cases, particularly in dealing with small firms, the practice is to pay 90 per cent when the bill of loading is handed over to the Mills and payment of the balance is made after actual delivery and weighment. Very few European management Mills have any dealings with Indian brokers. They mainly carry on their transaction through 8 European brokers who arrange for deliveries through Indian brokers. They charge as brokerage 1¼ per cent while the Indian under-brokers receive only ¼ per cent. The transit insurance of the Jute delivered to the mills have to be effected with the buyers, agents and as the managing agents of the Mills in many cases are also the managing agents of the Insurance Companies, the Mills prescribe the mode of transport, which is invariably by railway or steamers and rarely by country boats with lower freights. In addition to these, there is a considerable amount of future trading in Jute in Calcutta which will be discussed elsewhere.

The importance of sugarcane in the economic life of the Indian agriculturist has been very well emphasised by the Indian Tariff Board. "At all times it occupied a prominent position in agricultural economy as being one of the few crops on which the cultivator relies to meet his cash requirements, and at the present time, when the prices of other agricultural products have fallen to very low levels, the importance of maintaining the area under cane and its prices cannot be over-estimated. The payment of rent and irrigation dues depends to no small extent on this crop and any serious setback to its cultivation would not be without effect on the finances of atleast some of the local Governments."* In the cultivation of sugarcane and the manu-

*Report of the Indian Tariff Board on Sugar.

facture of Gur approximately 15 million people are employed. While the acreage under sugarcane in India is close upon three millions, among the Provinces the United Provinces have about 3.5 per cent of the total cultivated area under sugarcane, the Punjab 1.4, Bihar and Orissa 1.0, Bombay 0.2, Madras 0.2. The area under sugarcane in 1935-36 was roughly one million acres more than in 1926-27. A rough estimate of the price of cane crushed by sugar factories was Rs. 833 Lakhs, of the value of cane consumed by the Khandsari factories was Rs. 2565 Lakhs while the cane growers received about Rs. 3393 Lakhs. In recent years, on the recommendation of the Tariff Board, a high wall of protection has been raised behind which the Indian Sugar Mill industry is fast developing and consolidating its position. Till recent times the Government were mainly concerned with the improvement of the agricultural aspect of sugarcane and perfection of the process of manufacture, but lately the marketing side has gained prominence in the face of the complaints made by the public that the cane-grower was not deriving his proportionate share of the benefit which the import duty had conferred on the industry and as a result of this the Government have taken steps to secure fair prices to the cane-growers by legislation. Thus state intervention in the marketing of sugarcane has proceeded to a great extent.

Sugarcane is marketed in the form of Gur and Rab as well as in the raw state for the manufacture of white sugar in factories. Of the total cane production in India amounting from 61 million tons per annum, about 83 per cent is utilised for the manufacture of Gur and the rest for white sugar. Sugarcane marketing for factory purposes is more or less quite simple. In between the grower and the manufacturer there may or may not be any chain of middlemen. Minimum recovery of sucrose depends on the reduction of the period between the harvesting of the cane and its crushing by the Mill, hence the closer the canefields are to the Mills, the better is it for production. In India, for cane

transported on carts a radius of 16 miles should be the limit while in areas served by railways the cane should reach the mill within 24 hours of cutting. Thus the conditions favourable to concentration of production and direct marketing by the consumer are present in most of the cane regions in North India but not so in Bengal, and in the non-irrigated tracts of Madras and Bombay. In Bihar, particularly in areas not served by railways, the Mills attempt to secure their cane from the neighbourhood and for this purpose give out heavy advances in November at the time of sowing to the grower on 12½ rate of interest and this loan runs for 14 to 16 months till the harvest is reaped when accounts are settled, on delivery of the produce at rates prevailing then. Under another system, smaller amounts are advanced for short periods usually without interest and in the contract a rate is stipulated but actually market prices are followed. The receipts given by the Mills on the delivery of the produce freely circulate in the villages till they are encashed at the end of the week by the holder.

In the Saran District of Bihar where the Mills are better served by railways and can command a wider area, a class of middlemen called contractors have been entrusted with the work of securing cane. These contractors set up their weighbridges at the railway stations and growers bring to them their produce in carts. They have no fixed area of their operations, hence the competition among them is very great and each one tries to outdo others in offering seemingly favourable rates although very often cheating in weighment takes place and deductions on account of alleged dryage are made. Various ingenious tactics are very often employed in securing the cane of a farmer who has come from a long distance and who realises that unless his cane is sold quickly it would deteriorate, and fetch lower prices or become unsaleable. Many of these contractors "sometimes refuse the cane on the ostensible grounds that they have no storage room or that they have bought all they want, but really in order to induce the producer to take a lower

*Report of the B. & O. Banking Enquiry Committee, p. 64.

price."* These contractors are paid at a flat rate by these Mills. Some European contractors also take contracts from the Mills for the supply of canes from their estates and they pay the tenants at the same rates as the Mills and receive from the Mill a commission as their remuneration.

It has already been stated that the major portion of the cane is converted into Gur either for being marketed as such or for the manufacture of white sugar from it. Between 1908 and 1928 the average Gur production of the main Gur cane growing provinces has increased by about 37 per cent. The cane is crushed in the villages by bullock turned three roller mills and the juice is converted into Gur by the growers themselves or in partnership in Rohilkhund with the sugar-broker called Khandsari. Where the unit of cultivation is small, a few well-to-do ryots join the Khandsari in starting the manufacture of Gur. Juice is sold by weight, the unit being 100 kutcha maunds called Cikra. In some areas the Khandsari gives the grower an advance in July and August on condition that he would deliver a stipulated quality of juice at a fixed price failing which he would be liable to pay interest at the rate of Rs. 2 per month from the date of the loan. When the loan is given at the time of sowing the grower is compelled to agree to a lower price and this means a loss to the cultivator of about Rs. 10 per Cikra. After manufacture the Gur is purchased by the Beparis who sell through the Aratdars in towns. The charges in the United Provinces for the marketing of Gur from the village to the consuming point amount to Rs. 35 per 100 maunds out of which Rs. 5 or about 14 per cent represent porterage. In Western India the growers or Beparis bring the Gur on carts to the commission agents at Poona which is the most important Gur market in Western India. The commission invariably pays the seller in cash but he deducts 8 to 12 annas per palla and 9 per cent of the price as discount, as he has to give the buyer credit for 9 days. In the Vizagapatam district of Madras merchants congregate at Ankapalli and form a temporary pool of four months where they make their purchases for sale to the factories and distilleries.

In Gujrat, Bulsar is an important centre of Gur trade. Aratdars make their purchases from the producers in the villages through the Fatkia Dalal. They accompany the buying merchants to the villages and inspect the quality on the spot and strike the bargain after which the Fatkia looks after the transport.

In some markets of the Bombay Presidency Gur is sold by open auction while in others by secret bargaining. In the manufacture of Gur particularly of the Handi Gur, uniformity in size and weight is very necessary as otherwise it is liable to be damaged in course of transit.

The price which the consumer of Gur has to pay is burdened with the profits of middlemen and other incidental charges, to the extent of 45 to 55 per cent. The incidence of this on the consumer will become apparent when it is realised that Gur occupies an important place in the dietary of the masses and as the following figures prepared by the Tariff Board will show the consumption of Gur is greater in villages particularly among poor people than in towns among the well-to-do classes.

Proportion of Sugar and Gur Consumption.

Province.	District.	Rural Area. Proportion Consumed Sugar.	Gur.	Urban Area. Proportion Consumed Sugar.	Gur.
U.P.	Gorakhpur	1	10	1	1.5
	Etah	1	.75	1	1
Bihar	Manbhum	1	11	7	1
	Muzaffarpur	1	3	4	1
Madras	Anantapur	1	8	2	1
	East Godavari	3	7	1	1

The cultivation of tobacco is more or less centralised in certain portions possessing the conditions favourable to its growth, although it is cultivated in small plots attached to the farmer's homestead in various parts of the country.

The Ankapalle jaggery lends itself to long storage and wider marketing as the syrup is boiled up to the proper standard and the shape of the blocks looks like inverted flower-pots so that very little of its surface is exposed to the weather. The Ankapalle Co-operative Society was started in 1926 and its success in the organisation of the co-operative marketing of jaggery has been considerable. Bengal (292,800 acres), Bihar (141,600), Bombay (158,423); Burma (91,900), and Madras (268,800) are the main tobacco growing provinces. The most important tobacco belt of Northern India is in North Bihar and North Bengal comprising the districts of Rangpur, Dinajpur and Jalpaiguri in Bengal, and Purnea, Darbhanga and Muzaffarpur in Bihar having an acreage of 338,800 or about 29 per cent of the total tobacco acreage in India. In Bombay Presidency cultivation is localised in Gujrat which has 35 per cent of the Bombay Presidency acreage, Satara District 12 per cent and Belgaum in the south 31. In Burma, the delta District (Henzada), and Central Burma (Pakokku) are the main centres. In the Madras Presidency Vizagapatam District in the norh, East Godavari (the famous Lanka tobacco) in the centre and Coimbatore (the Manavari) and Madura (Dindigal tobacco) in the south are important. This localisation indicates that although the primary stage of marketing is simple, the distribution of the produce all over the country and to the exporting points has given rise to a well-developed network of middlemen. India exports about 29 million lbs. of unmanufactured tobacco valued at Rs. 90 lakhs of which 43 per cent goes to the United Kingdom, 16 per cent to Aden, 14 per cent to the Netherlands and 12 per cent to Japan.

In North Bengal different varieties of tobacco are grown to supply different markets, e.g., for Bhengi tobacco the market is Burma while Matihari is despatched to Assam and the Manilla and Sumatra varieties to Madras. The growers sell to local Mahajans or Paikars or to bigger ryots. These Paikars work usually as agents of Dalals or Aratdars to whom come the dealers from Madras, Akyab, Moulmein and Rangoon, and Western India. Where the grower has

borrowed from the village Mahajan and sells to him, he has to give him an additional weight of 2 seers per maund and in many cases he suffers also in the rates he gets. The weights used vary from place to place e.g., in Habiganj (Dist. Tipperah) 80 tolas make one seer, in Rangpur 90 tolas and in Jalpaiguri 93 tolas. These Dalals have warehouses of their own and in addition to acting as commission agents for the buyers who come to them, for which they receive 4 annas to 6 annas per maund, they trade on their own account also and sell to bigger Aratdars in towns or to factories. Guntur tobacco in the Madras Presidency has a large export trade as it is eminently suitable for cigarette manufacture. The export trade is in the hands of a few European firms and in recent years Indian firms have also taken it up. The Indian Leaf Tobacco Development Company have a firm grip on the marketing of the "flue-cured" tobacco introduced by them. They give advances for the construction of barns on condition that the barn cured tobacco must be marketed through them. This tobacco is classified into the four grades by the growers and is purchased by the Company if it meets with their approval. Paikars go round the villages and make purchases for the big Aratdars who supply to the big exporters. The charge made by the Paikars amounts to Rs. 5 per candy or 12 per cent and the Aratdar's commission rate varies from 2 to 3 per cent, thus 15 per cent is swallowed up in the remuneration of the middlemen at this stage. The grower does not get a good price as his tobacco is not graded and the leaves are not uniformly cured. In the Guntur market only very superficial inspection of the tobacco bales is possible owing to copious supply which averages about 5000 bales daily, hence the price is offered usually for the average quality in the bale and provision is made for the possible loss to the grower due to the necessity of regrading before export.

It is difficult for the Indian merchants to carry on foreign trade directly as (1) they cannot grade the tobacco according to the standards required and cannot prepare an exact sample of the consignment. The foreign buyers as a

result of bitter experience are no longer willing to quote prices without seeing the goods and this often is a great handicap for the exporter. The merchants have no agents of their own in London and the agents in London "quote a low price from London and if the Guntur merchants accept it they sell tobacco at a higher price and pocket the difference but if the actual price realised when the consignment arrives at London falls below the quoted price, the loss is transferred to the account of the consignee."* (3) Their capital is not large enough to enable them to carry on business continuously as it takes five months for the merchants to realise their money. (4) They do not possess the facilities for pressing and baling so as to keep the freights low and also for hedging themselves against fluctuations in the exchange.

Various regions in India are pre-eminently suited for the growing of fruits. The Himalayan slopes as well as the Gangetic plain and the eastern and western coast strip of Deccan grow a large variety of fruits the marketing of which if properly organised would contribute in no small measure to improvement in the economic condition of the grower and give an impetus to the development of fruit growing on a commercial scale. In the present disorganised condition of marketing the grower receives a very small portion of the prices paid by the consumers.

Province.	Fruit or Vegetable.	Pcg. of gross return to grower.
Bihar (Sabour)	Mangoes	21.9
Bombay (Nasik)	Papya	36.8
Bombay (Nagar)	Mosambi	28.6
Bombay (Bulsar)	Mangoes	61.0

The regions of the consumption of these fruits are mostly in the towns and the fruit season being relatively short, the supply is apt to be heavy resulting in a glut in

*Evidence of Prof. N. G. Ranga before the Madras Banking Enquiry Committee,

the market. In Calcutta alone as many as 2147 baskets of mangoes in 1933 and 1512 in 1934 were received from the principal centres of South Bihar. In Poona City the imports of fruits were as follows :—

1930	..	2,20,552 maunds.
1931	..	2,12,214 „
1932	..	3,19,756 „

In Bombay markets in 1928 the import of home grown fruits amounted to 1,824,953 packages and 63 waggon loads in addition to foreign fruits imported into the Presidency valued at Rs. 1,00,893 in 1928 and Rs. 2,78,889 in 1932.

The supply of certain fruits like bananas, lemons and santras is spread over the major part of the year while in case of others like mangoes, litchies, muskmelons, guavas, etc., the season is quite short. Hence the work of the plucking of the fruit, its assembly, packing and transport to the big centres and its subsequent distribution to smaller markets for retail sale to the consumers has all to be rushed and finished within a short period.

The conditions under which the fruit is grown vary from region to region. Commercial Orcharding is to be met with in the Himalayan slopes while in the plains, large orchards are usually owned by landlords or by big ryots only where irrigation facilities are well-developed. In most cases smaller orchards therefore predominate. An enquiry into fruit gardening in the Poona District showed that out of 43 growers, 23 grow one fruit only and 16 grow only two kinds of fruits. Of these 43 growers, the number of growers having an acreage of :—

More than 10 acres under fruit	..	3
More than 5 but less than 10 acres	..	6
More than 2½ but less than 5 acres	..	9
More than 1½ but less than 2½ acres	..	9
More than 1 but less than 1½ acres	..	8
Less than 1 acre	..	8

Thus in this case about 37.2 per cent of the growers have gardens of 1½ acre and below it. In the Baramati and Indapur Taluks on the Nira left Bank Canal the corresponding percentage was about 50. From these figures it is clear that in most parts of India, fruit growing does not give whole time employment to the farmer but is secondary to his main business of farming. This great fragmentation of fruit growing makes the assembly of the fruits difficult and affects the marketing of the fruit also by making the direct marketing of the produce by the grower to distant markets not remunerative. The practice of selling the standing crop to middlemen is therefore common in many parts of the country. In Poona district the Khatidar who has great experience in this business buys up the standing crops and incidentaly undertakes many risks of damage and under-production which it is difficult for the growers to bear. In the case of bananas the standing crop is not actually sold but the Khatidar enters into an agreement to buy all the bunches that may be produced at a price which is fixed in advance at the commencement of the season, or in some cases the agreement is for the purchase of a fixed number of bunches. In the Purandhar Taluk of Poona District in orange orchards the contract of sale is for a number of years. The usual form of the Khoti system is for the sale of the crop for one year to the Khatidar or Bagwan or the Khatik as he is called in Bihar. The buyer makes an estimate of the crop and in making his offer, takes into account the condition of the season, e.g., in mangoes usually the crop is good in alternate years. The actual sale may be by contract or open auction. The buyer has to arrange for the watching of the orchard and the plucking of the fruit. In some cases e.g., figs, the sale is made quite early, when the fruit is just on the tree and here the buyer has to look after the irrigation, removal of the weeds, stirring of the soil and even of manuring it. The payment of the price is usually made in two or three instalments, usually 50 per cent at the time of signing of the contract and the balance after half the crop is harvested. As the transaction is highly speculative, it is not uncommon for the middleman to avoid making

payment of the subsequent instalments, if the instalment if the crop does not prove ulimately to be a good one. As many of these middlemen work on capital, borrowed from wholesale dealers or brokers of the town markets, there is a growing tendency for them to default in paying the subsequent instalments if the prices go down. Gadgil points out that "another general complaint made by growers regarding the class of Khotidars, was that they never give any agreement in writing to the growers. The growers on the other hand, usually passed a receipt in writing for the first instalment, in which the total purchase price and the period of the contract were specifically mentioned. The other conditions of the contract are usually not reduced to writing. This leads to the position of the grower being very weak in case of dispute."

Big growers also despatch fruits to markets from their gardens and in many cases in Bihar, the wholesale merchants of Calcutta sometimes depute their own agents to purchase the standing crops or to give large advances to Bagwans or other middlemen on condition that the produce is exclusively sent to them. In Bombay Presidency, a new class of middlemen has sprung up called Hundikaris who take charge of consignments at railway stations, and forward them to the commission agents in city markets. They book the fruits, load them in vans, pay railway charges and facilitate the quick transport of the goods in every way. Their charges, which vary from 4½ pies to 9 pies per parcel, are usually paid by the commission agent who deducts it before making payment to the grower, thus although the Hundikari serves the important function of giving technical assistance to the ignorant grower in the despatch of his produce, he plays a great part in determining the destination of the consignments and in this he acts more in the interests of the Commission Agents than of the growers themselves.

The Commission Agent or Dalal in city markets arranges for the delivery of the fruits and transports them to their warehouses where the lots are sold to wholesale

dealers by open auction or private treaty or auction with secret bidding. The open auction is restricted to the lower grade of fruits while the auction with bidding "under the cloth" is mainly for higher grades and also for fruits remaining unsold overnight. The lot of each consignee is auctioned separately after some of the baskets have been exposed at random for inspection. In the case of the sale of Kashmir fruits by the commission agents at Rawalpindi, the practice is to auction them to highest bidder. Commodities, like guavas, figs or mangoes the supply of which during the season is quite plentiful, is usually sold by private treaty. The sales are continous during the morning and the prices are fixed by higgling and are to some extent determined by the quantity of arrivals in course of the day. The Commission Agent may base his remuneration as a percentage of the sale price or levy a flat rate per basket on a scale based on the rate at which it is sold, e.g., in Calcutta market the flat rate is 2 annas 6 pies for Behar fruits and 2 annas per basket for Madras fruits. This corresponds to the rate of Dalal's commission of 6¼ per cent on fruits coming from outside the Presidency while those coming from within the Presidency pay 4 annas per package or at the rate of one anna per Re ad Valorem. In the Poona market, for pomegranates the rate is one anna per basket if the sale price was less than Re. 1, 2 annas if the price was below Re. 1-8 and 8 annas if Rs. 3 or more. The commission includes various payments made by the salesman on behalf of the consignor, including railway freight, cost of transportation, postal charges and octroi dues, if any and in Poona, a charge called Kasar for money changing. The agent also makes a demand on account of rent for the warehouse or enclosure where he exhibits the produce for sale. Realisation is also made on account of "Dharmadaya" or contribution for charitable funds. In Calcutta the agent deducts 5 annas 6 pies from the price paid by the buyer and makes the usual realisations from the consignor on account of commission and other charges. In the fruit trade of Rawalpindi the commission agent realises from the purchaser commission at the rate of Rs. 3-2-0 per cent.

The following statement prepared from various sources will give an estimate of the charges paid to middlemen and other incidental expenses incurred in the second stage of marketing from the producing centre to the city markets.

Place	Fruits	Percentage to Freight & Transportation	Sale price of Agents Commission	Other Charges	Total.
Calcutta	Mangoes	17.2	9.0	5.0	31.2
Poona	Mosambi	31.3	11.5	9.7	52.5
Bombay	Orange	18.5	11.3	0.8	30.6
Bombay	Grapes	18.7	17.7	0.3	36.7

The nominal rate of commission is not high in view of the services rendered by the Dalal but when the cost of packing and transport from the garden to the station is added to the above cost, the burden becomes well nigh unbearable. The cost of packing varies from 7 per cent in the case of Mosambi to 12 per cent for Grapes and Papyas. In the figures for Poona given above, "Other charges" include carting 6.7, Dharmadaya (Charity) 0.7, Postage 1.4 and Rent 0.7 per cent. The actual rates charged would not be so objectionable if the transactions were fair and honest always. Mr. K. C. Naik, Horticulturist to the Government of Bihar in course of his study of marketing of Bihar fruits in Calcutta writes:—"Detailed enquiries made from various sources confirm the suspicion that the agents do not all live upto the expectations of the consignors and unless steps are taken to license the agents, the system can hardly be capable of improvement". In the Poona fruit trade, the sales accounts sent by agents to their clients do not usually disclose the details of actual sales, the price shown being "a combination of both averaging and adjustment". Where the agent also trades on his own account, "the commission salesmen themselves admit that the actual prices are not returned."* The wholesaler buys at the auctions held by commission agents and where the number of wholesalers is not large as in Poona the retailer also buys there. Where

*Gadgil & Gadgil—Marketing of Fruit in Poona—p. 68.

the wholesaler buys it, he tries to keep the fruit for a few days in his warehouse, where cold storage facilities are not available, or consigns it to other centres or markets. From the Calcutta market, mangoes and other fresh fruits are regularly exported thrice a week to Rangoon and the wholesale merchants handle this trade by buying in the local markets, hence on the shipping days there is usually a rise of Re. 1/- per basket and the wholesale price for unripe fruits is at times higher than that for ripe fruits which are not suitable for exports.

For sale in the city market the retailer is an important link, although in the case of some fruits having a short season as the bananas grown in the Jumnar Paleka, the produce is bought directly by the wholesalers who also carry on retail trade themselves and they sell through their own retail shops or by hawkers and stall-holders.

The retail sale is carried on through retailers in the Municipal markets, street hawkers and vegetable vendors. The stall-holders have to pay rent to the Municipal authorities at monthly rates while some who occupy small patches of uncovered area within the market enclosures and carry on retail sale in the morning and hawking in the afternoon pay a daily rent. In the Stuart Hogg Market of Calcutta there are 25 whole salers and 80 retailers and the Corporation, in addition to rent levies one anna per basket sold from the wholesalers and two annas per basket from the retailers. In the College Street Market of the same city however the wholesalers have not to pay any rent but the rental for the retailers is 8 annas per day. Every wholesaler has to pay a charge of 3 pies per basket and "is further bound by an agreement to import at least 7200 baskets per month. If import falls much below this figure, a rate of one anna per basket is charged." In the Crawford Market of Bombay the retail section is covered with 1027 stalls in rows having an average dimension of 6 ft. by 7 ft. the rent varying from Rs. 20 to 300 per quarter according to location. There are storing chambers below the stalls but the ventilation is poor. An important function which the retailer

performs is to grade the fruits before sale. He gets credit from the commission agents and also occasional money loans.

The hawkers carry the fruits from street to street to the consumer's houses. In Bombay they are licensed and they have to pay Rs. 7/8 per month to the Municipality for stationary handcarts. They take their position at important street corners or crossings or near the business centres or just outside the markets. The itinerant hawkers are of three types:—(a) the basketman pays Re. 1 per month, the man with the handcart Rs. 3 and the bullock cart Rs. 5. They have very little capital of their own and work with money borrowed from the money-changers in the market paying interest which varies from six pies per rupee per day to one anna per rupee. Inspite of this they make good profits and can compete with the vegetable and fruit shop-keepers as they have not to pay any rent and their turnover is pretty rapid. Gadgil estimates that in Poona "the daily purchases of these hawkers range in value from Rs. 2 to Rs. 5 and they estimate the daily earnings at from annas ten to Re. 1." In Bombay and Calcutta there is a class of vendors called squatters who squat on the pavements along important thoroughfares and for his privilege they have to pay rent at the rate of Rs. 3 per month for an area 5 ft. by 3 ft. There is an extensive interprovincial trade in certain fruits which properly regulated will increase considerably the profits of the fruit growers. Large consuming centres not only attract the fruits from the neighbouring districts but also from distant areas and this trade is certain to increase with improved transport facilities. Poona masambi goes not only to Bombay city but also to Gujrat and Berar while Poona santras have a ready market in Lahore and Ludhiana in Punjab and Meerut and Lucknow in the U. P. in the north and Madras and Hyderabad in the south. Bombay city derives its fruit supplies from the district of Poona, Nasik, Ahmednagar and Ratnagiri. In Calcutta 60 per cent of the total imports of fresh fruits consists of mangoes and the supply of this fruit is derived from the

Godavari, Vizagapatam and Salem districts of Madras, Bhagalpore, Muzaffarpur, Darbhanga and Patna districts of Bihar, Moradabad, Rampur, Benares and Lucknow district of U. P. The Kashmir fruits are marketed through the commission agents at Baramula and Srinagar who despatch the produce to the bigger markets through the Rawalpindi dealers.

In recent years under the auspices of the Bombay department of Agriculture an attempt has been made to promote the export of mangoes to England. The results are quite encouraging but any profitable trade can only develop, where a proper selection of the suitable varieties has been made and the picking has been done at the correct stage of maturity. Proper methods of packing and the right storage temperature during the transit are also necessary factors. In the experiments made the Alfonso variety of mangoes was selected owing to its attractive appearance, its luscious taste, its good keeping quality and its lack of fibre. An attempt was made to grade the fruit into special and commercial classes according to their weight and the number which could be packed in the standard trays. It was found that direct shipment to England by sea was more economical than the overland route via Marseilles."* On an average the landing cost per fruit came to annas five and pies six in the case of direct shipment by sea while through Marseilles by railway the cost came to nine annas and eleven pies. The average price obtained in London was eight annas three pies per fruit leaving to the exporter a net profit of 50 per cent. Thus properly organised the export trade in mangoes has a great future and in course of time the export of other fruits like oranges and bananas may also be taken up.

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*G. S. Cheema and P. G. Dani—Report on the Export of Mangoes to Europe in 1932 and 1933.

CHAPTER V.

SALE.

There is no doubt that much of the profits which the grower expects depend on the method of sale in the local market. Selling is an important link in the marketing process and it involves securing a buyer and obtaining the best possible prices under present conditions. The grower is ill-equipped to act as an efficient bargainer as he is not familiar with the market practices and he cannot afford to devote much time over the sale of his goods. He has therefore to sell his produce in the village to agents of merchants or to market it through commission agents. The market is not well organised, the commodities are not well graded and in most cases these commission agents are not licensed, hence abuses are rampant and the grower does not always receive the full value of his produce. Salesmanship of a high order is no doubt required in this work, which would really prove beneficial to the ryot if the honesty of the agent could also be guaranteed. Where this is not so, the method according to which the sales are usually conducted in our markets have to be improved so as to ensure better prices to the seller and to minimise the risks of abuse and fraud.

In the markets of India, sales may be said to be conducted according to four methods:—(1) The Hatta or sale by secret bidding is very common all over India, particularly in the sale of grain. The actual procedure differs in different localities. In the northern part of the Central Provinces, "the grain is heaped on the ground or is kept open in bags. Then the Dalal comes and stands before the heap and asks the buyers for their offers. One by one the buyers offer their rates, not openly but secretly, by means of finger manipulations with the Dalal. The Dalal holds in his hand a piece of thick cloth covering the fingers and the palm. If a buyer wants to offer Rs. 15-4-0, he pushes his hand underneath the piece of cloth and says loudly Rs. 14

and grasps one finger of the Dalal with an upward jerk. This is supposed to mean Rs. 14 plus one or Rs. 15. Then he shouts "anna" and grasps four fingers which means four annas. Then he shouts "pies and grasps three fingers."* In the Punjab however the code is different. There the value of each finger depends on the prevailing price of the article. If the rate is Rs. 5, each finger indicates one rupee but if it is higher, the value of each finger rises. The annas are indicated in terms of 'paos' or quarter rupee. In Jute sales, when the sample is approved the Aratdar and Dalal join hands under a piece of cloth and the former writes with his finger the anna portion of the price per maund on the palm of the Dalal who indicates by the shaking of his head approval or otherwise of the offer. When the bargain is struck the Dalal strikes the hand of the Aratdar and the cloth is removed. Usually one bid is allowed by each buyer and when all have given their offers, the middleman declares openly the highest bid and the bidder's name and the transaction is closed. Where repeated bids are allowed, after the first offer has been secretly given by all the bidders, the middleman asks all of them to offer more and bids are continued till no one is ready to bid higher. This system has some variations, e.g., under the Phullarwan method, the Dalal accompanies the buyer but only to advise him as the offer is made by the buyer himself. At Jaranwala the bids are made by the Dalals while in Amritsar both the Arhatiya and the buyer are represented by Dalals.

(2) Sale by "quoting on samples" is carried on at many places, in gram, cotton as well as chillies and tobacco transactions. The commodity is not heaped up but kept in bags on carts and the Arhatiya collects from the sellers samples of one to three lbs. and takes them round and offers are made on the basis of these samples. After the price is settled and the bargain struck, there is usually a wrangle over the quality on the cart and that of the sample. Allowances are claimed on that account and every effort is made by the buyer to go beyond the bargain.

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*P. D. Nair—Grain Markets in North C.P. (Agriculture and Livestock in India, Vol. I, 1931, p. 364).

(3) Another common system is known as the Dara sale, in which heaps of grain of different qualities are sold at a flat rate. The great advantage of this system is that within a short time a large number of sales can be effected. In the Guntur tobacco market where the daily arrivals of carts are very large sales are made practically on these line . Although in making pay ments the Arhtias try to apportion the prices according to the quality of the article tendered by each seller, as a matter of fact, the seller rarely gets good value for superior quality. Even when apportionment is made, the seller may try to favour some of his patrons by calculating prices in such a way as to benefit them, as the following example will show. "Suppose that two heaps of different qualities, one of 50 maunds and the other of 20 maunds, are sold at a flat rate of Rs. 3 per maund although the 20 maund heap may be better in quality than the latter. The Arhtiya may give Rs. 2-14-0 per maund for the inferior and Rs. 3-2-0 per maund for the superior quality. It thus looks as if he has been perfectly fair but actually he pays only Rs. 206-4-0 although he gets from the buyer Rs. 210 thus making an extra Rs. 3-12-0 for himself.*" This practice stands in the way of the cultivation of the better varieties of crops.

(4) The Auction System has been used in the Punjab in improving the quality of cotton and in many well developed markets it is preferred to any other method of sale as it ensures fair dealing to all parties and secures a premium for superior quality.

In 1906 when the Department of Agriculture in the Punjab tried to introduce an acclimatised variety of American cotton from Dharwar, it arranged with some firms to sell this cotton at a premium of Rs. 1-8 per maund over the price of Deshie, but as this did not prove satisfactory the Department, introduced a system of auction sales of the unginned cotton to enable the farmer to obtain better prices for superior quality. Sales were held on fixed dates after due notice to all parties concerned and at these

*L. R. Dawar—Market Practices in the Punjab, 1934, p. 33.

sales cotton was roughly graded by the officers of the department. This system proved a success as in 1908 there were only 2 auctions at which a few hundred maunds of cotton were sold at a premium of Re. 1-5-0 to Re. 1-9-0 per maund over Deshi and in 1918 twelve Government and two private auctions were held at which 122,000 maunds of 4F cotton were sold at a premium of Rs. 3-8-0 to Rs. 5 per maund over Deshi and Re. 1-8 to Rs. 2-8 over other American varieties. Although this system gave the farmer a premium, it had this drawback in that if the demand on the auction day happened to be weak, the prices would not rise and the farmer would be dissatisfied. The Indian Cotton Committee were of opinion that "their sphere of usefulness is limited though, upto a point, they have proved of great value and in fact is the best agency available. We regard them, however, as only a temporary step, if for no other reason than that the Staff of the Agricultural Department is totally inadequate to handle very large quantities of cotton."* A recent development in this connection is the holding of auctions by private agency and by Co-operative Societies. In some of these, the cotton is sold on sample, the seller has to produce and be personally responsible for his sample which after the sale is sealed up and deposited at the agency. The weighment takes place at the godowns of the sellers who are bound to abide by the arbitration of the Agricultural department in case of dispute.

Secret bidding is not harmful so long as the brokers go round in groups for the accepted bid is declared in the presence of all and the chances are that the prices would go up as a result of competition but where the bidding is carried on with a single broker the risk of collusion between the broker and the Arhtiya is great. Besides this where as in Rohtak, both the buyer and the seller have the option of cancelling the transaction at any time and under any pretext, much inconvenience is caused. In some markets the buyer alone has the privilege of refusing an offer and this makes the position of the seller difficult. This system on the whole is

*Report of the Indian Cotton Committee, p. 172.

too complicated for the average cultivator to follow and he is compelled to place much reliance on the Arhtiya. Sales under the auction system take a good deal of time and it is difficult to manage them in big markets unless some system of grading is developed and in this, as there is no secrecy, experience in buying yields no advantage while in the excitement of the bidding rash offers may be made which may land the buyers in loss. In the secret system, the buyer not knowing other bids has to offer his maximum to secure the lot whereas in the auction system, bidding proceeds by small steps and the sale may take place at a rate much lower than what the buyer was prepared to offer as a maximum. On the other hand the rates are likely to rise in the auction system if there is a fairly steady demand, as with strong demand auctions push up prices and in a weak market, secret bidding is more favourable. Another great advantage of the auction system is that a buyer can get guidance in making offers, from those made by other buyers and he can dispense with the services of a broker and save his charges.

Sale Methods in the Punjab Markets.

Markets.		Methods.
Taranwala	..	Under cover with Repeated Bid
Gogra	..	Under cover with Single Bid
Saragoda	..	Under cover with Single Bid
Lyallpur	..	Under cover with Single Bid
Kotkapura	..	Auction.
Amritsar	..	Under cover with Single Bid
Batala	..	Open Bid.

In the case of staple commodities sold through organised produce exchanges the terms of sale are more regularised and well defined. The Bombay Cotton Trade Association, the East India Cotton Association and the Bombay Cotton Exchange control the major portion of the sales. All contracts on "Colaba terms" are subject to 5½ per cent

discount and these include (a) Railway Delivery Terms under which the seller endorses the railway receipt to the buyer or his agent on rceiving 90 per cent of the value and the balance after the deduction of the usual discount is payable on inspection of the cotton, (b) Office terms, under which delivery is made at the godown of the seller or his agent and the buyer is required to pay one half per cent commission to the seller or his broker. (c) Mill terms under which delivery is made at the godown of the seller and in addition to the usual commission a charge of eight annas per bale is payable to the store-keeper of the buyer. In transactions on office and mill terms, the buyer can take samples from 5 per cent of the bales of the entire consignment and these samples are sealed for verification later on with the article delivered. In the case of ready contracts, inspection of the cotton is usually made by the buyer before payment but in the case of cotton meant for export, the "home guarantee" is insisted upon so that the seller is bound thereby to refund to the exporter any allowance fixed by arbitration in Europe. For "Forward Contracts", every transaction must be made out by the broker in duplicate, of which one is signed by the seller and made over to the buyer and vice versa, both being countersigned by the broker. In the contract the necessary details, viz., names of the broker, the parties, the number of bales purchased, the origin and definition of quality as laid down by the Exchange, the price settled, and the measurement per 100 bales and the date and the place of delivery, have to be mentioned.

In Jute Sales in the Calcutta market disputes are settled by he arbitration of the Bengal Chamber of Commerce which, although primarily intended for members, also extends these facilities to non-members on payment of fees. Arbitration is held for disputes under (1) Quality of gunnies, (2) General trade questions affecting Jute, (3) Kutcha bales according to the European and non-European standards, (4) Pukka bales, (5) Quality of cuttings. Names of arbitrators are recommended by their firms and the actual board of arbitrators is formed by the

Arbitration Sub-committee of the Chamber. When the arbitrators are appointed they inspect the original contracts and correspondence which may have passed between the two parties. The seller is then given an opportunity of going to the buyer's Mill or Press house where he can select a number of parcels from the entire parcel on which he places his seal and the buyer is also given similar facilities. Both parties bring their samples to the examination room of the Chamber and before the arbitrators examine the Jute, each party is required to send a representative for identifying the bales and a certificate that this has been done, is signed by each of the parties. The award of the arbitrators has the force of law.

In the case of exported Jute, the "Home Guarantee" is even now popular although in many quarters its abolition has been demanded. The baler in some cases voluntarily makes an allowance called "Amicable Settlement" in cases of dispute. The "Invoicing Back" clause by which the buyer may refuse to accept the consignment at all in case its quality differs so widely from the buyer's agreement as to be useless, is a very effective safeguard but it is rarely brought into use.

CHAPTER VI.

MARKET FINANCE.

Agriculture being an industry of slow turn-over, the grower requires financial assistance to bridge over the gap between the sowing and harvesting of the crop. With his small scale cultivation and tiny holdings his capital is too semall and his income is not such as to leave large savings The produce of his land does not always suffice for the whole year and he is compelled to seek assistance for subsistence as well as for commencing his agricultural operations in the following seasons, hence short period loans figure so prominently in rural indebtedness in India. The following figures have been taken at random from the results of the village enquiries conducted under the direction of the Central Provinces Banking Enquiry Committee. "Short-period" loans here include loans for the purchase of seeds, manure and other cultivation expenses as well as for the cost of maintenance which becomes very urgent in the months preceding the harvest.

District.	Village.	Peg of short period loan to total amount borrowed during the year.
Amraoti	Sirkhed	27
Amraoti	Assegaon	39
Akola	Poti	35
Buldana	Malgani	20
Nagpur	Mathani	36
Bhandra	Adayal	22
Wardha	Wadner	55
Balaghat	Rajigaon	37
Jubbalpore	Bargi	28
Saugor	Surkhil	55

In the Bellary District of Madras this percentage was about 41 p.c. and it was estimated that about 70 per

cent of the ryots borrowed at the commencement of the sowing season. "Practically the only borrowings made by cultivators are those taken at or just before the commencement of cultivation operations. Loans are not taken subsequently, e.g., at harvest time. Certain dues which are to be paid off by a certain date are usually paid out of the sale proceeds of early pickings". The extent of indebtedness varies in different areas. From the figures collected by the investigators of the Indian Central Cotton Committee we find that in Berar 64 per cent of the cotton growers had to borrow, in North Gujrat 71, in Middle Gujrat 82.4, in East Khandesh 78, West Khandesh 71, Sind 94, Madras 70 while in the Punjab only 51.4 per cent. This dependence of the producer on borrowing has given the money-lender in the village great predominance in the primary stage of marketing although in recent years with better facilities for credit and competition among the mahajans themselves, the grower finds himself in a stronger position than before.

The importance of the Sowcar, as a source of marketing finance varies, however, in different Provinces. According to the Indian Central Cotton Committee, of the amount borrowed by the cotton growers, the percentage advanced by Sowcars was 90 in the North Gujrat, 77 in Sind, 68 in the Punjab, 65 in Middle Gujrat, 53.5 in East Khandesh and 27.3 in Madras. Co-operative Credit Societies were responsible for 66 per cent of the loans in West Khandesh, 31 in Berar, 18.4 in Middle Gujrat, 8.8 in the Punjab and 2.5 in North Gujrat. In Madras Presidency the landlord contributed 56.8 per cent of the loans, in the Punjab 16.9 and in Sind about 10 per cent.

The following table illustrates the sources of loans in a few of the Punjab Districts.

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*General Report on Eight Investigations into the Finance and Marketing of Cultivators' Cotton, 1925-28, p. 10.

Percentage of loans obtained from different sources.

Sources.	Lyallpur Dt.		Ferozepore Dt.		Attock Dt.	
	Cash.	Kind.	Cash.	Kind.	Cash.	Kind.
Money-lender	28.8	..	27.2	51.9	74.7	74.1
Co-op. Societies	15.0	..	10.8	..	7.2	..
Arhtia	15.6	..	21.5	..	..	..
Landlord	10.2	..	36.8	43.7	0.2	0.7
Relations	9.7	..	2.0	4.4	13.7	25.1
Others	20.7	..	1.7	..	4.2	0.1

The farmer secures financial assistance in various ways, one of which is to borrow from the money-lender on hand-note or other security often at a high rate of interest and when the crop is ready he delivers the commodity to the commission agent and obtains an advance sufficient to repay the loan or sells outright a portion of the produce and hold the balance up for a rise in price. In Coimbatore, bigger ryots deposit their crop of cotton and groundnut with proprietors of ginning and decorticating factories and commission agents who advance them upto 75 per cent of the current market price with which they repay their own loans. These factories also advance to smaller ryots 50 to 70 per cent of the value of the approximate yield of their fields with a view to enable them to repay their Mahajan but the stipulation usually is that the advance from the factory will be repaid in kind and any balance left over at the end of the season will be paid in cash.

In the United Provinces, loan transactions of this type between the grower and his Mahajan are known as Kachha Hisab loans. The money-lender opens the Lekha or Khata (account) of the borrower (Assami) in his books and enters on the right hand side every advance made to him and payments received are entered on the left side. In grain trans-

*Shah and Davar—Finance and Marketing of Cultivators' Wheat in the Punjab, p. 42.

actions the rate of calculating the money value is 4 chataks (¼ seer) below or above the market as is suitable to the Mahajan. In these loans the Mahajan avoids paying in cash what he can supply in kind and insists on repayment in kind and this is done at harvest time but the rate is not settled at that time but is postponed till the annual Hisab which takes place in July when the Rabi crops have been sold. The Kachha loans usually carry Sal savaya or 25 per cent rate of interest per annum and for the calculation of the interest the year is divided into 3 terms:—(1) middle of July to middle of October, i.e. period from the sowing of the Kharif to the sowing of the Rabi crop, (2) from October to middle of March, (3) middle of March to July. In preparing the accounts, the interest on the previous year's balance is first calculated at 25 per cent per annum, then advances given out in the first term are added and 25 per cent of the total is counted as interest. After this, advances of the second term are added and interest at the rate of 12½ per cent is calculated. For the third term no interest is charged as during this period very little advances are made. Thus by the manipulation of accounts the money-lender succeeds in securing a larger share of the farmer's produce than what is his due. "It is the unsecured Kachha Hisab loans which are the greatest stumbling blocks in the way of efficient marketing and on them is also paid highest rate of usury."*

There is no doubt that agricultural finance determines for the farmer, when and how he will have to dispose of his produce. The connection between financing and marketing is very close in India as every intermediary in a smaller or greater degree is also a financing agency, hence the advances given by the Bepari or Paikar to the grower to secure his crop are very important. Financial assistance of this type is either for having a prior hold on the crop or to enable the grower to hold up the produce for a rise in prices.

*Organisation of Wheat Trade in N.W. region of U.P. by Tiyugi Prosad, p. 23.

In some cases the advance is taken at the time of sowing or before the harvest. In the arecanut trade of Malabar the advance is given before the crop is ready. If the producer borrows Rs. 25 from a middleman, he executes a bond stipulating that 5 Tulams (18 3/4 seers—1 Tulam) of nuts valued at Rs. 60 will be delivered to the trader in 6 months. These hard terms are not ordinarily enforced and the grower is paid at market price but if he fails to make delivery on the stipulated date the producer is sued in the Court on this bond. The more solvent growers obtain loans at 12 to 24 per cent interest on the condition that they will have to repay it in kind at market prices but the system of accountkeeping is such that there is always a difference in the rates and the trader makes illegal profits. Nowhere is the hold of the money-lender on the farmer greater than in Sind. Here about 94 per cent of the cotton growers enquired into borrowed at the time of the commencement of cultivation and 77 per cent of these loans was derived from the money-lender. He is also the main source for the supply of seed cotton.

Source of Seed Supply.

	Sind. Per cent.	North Gujerat Per cent.
Sowcar ..	58	30.5
Ginning Factory ..	30	48.5
Bania ..	2	2.5
Landlord ..	1	3.5
Cultivator's own seed. ..	4	11.5
Other sources ..	5	2.5

Out of the 721 cases investigated into in Sind, 680 were in debt of whom 64 per cent had executed bonds containing the stipulation of selling the raw cotton through or to the Sowcar. It was found in some cases that the whole of the crop was taken by the money-lender or the produce had to

be deposited with him soon after picking. "The net result of all this is that, as soon as the crop is picked the cultivator loses all control over it and there is nothing left with him which he can hold up or on the security on which he can obtain loans. It has been computed that 484 out of 586 persons who held up Kapas at this period (second picking) did not receive payment; and of these 484 cases, 439 or 92 per cent are marked 'payment credited to debt account'. In the final period also, when all the Kapas has been picked and a good portion of it sold, one finds almost the same tale. 603 out of 686 who sold their Kapas, i.e., 90 per cent did not receive payment in full for the same; in 513 out of these 603 cases or in 85 per cent cases the payment was again credited to debt."

In Bengal, the Marwari money-lender very often lends to the ryot on the security of the growing crop on condition of having a lien on one half of it. This "Burga system" is analogous to the sharetenancy which is such a great feature of landholding in Bengal. In many parts of that Presidency the Dadan system or advances by the middleman to secure the crop is in vogue particularly in the Jute or rice districts. In North Bengal, under this system, the advance is given on a simple bond, either with (1) the stipulation that the borrower will be bound to sell jute at a stipulated rate or (2) without any such express condition but it is always implied. The advance also is given on a written contract on condition of sale after harvest at market rates. In the case of petty ryots harder conditions are sometimes imposed viz., interest varying from 24 to 75 per cent is charged and the stipulated rate is often kept 10 to 25 per cent lower than the anticipated market rate. In the Central Provinces, a similar practice is found called the "Laoni" system under which the cultivator is given an advance on his standing crop and he undertakes to sell at a stipulated rate which is much below the market rate. This ensures high profits to the creditor and secures him against any loss due to default. This system is however dying out and though advances no doubt are given occasionally there is no legal

obligation to sell to the creditor at a stated price. In the case of many of these advances particularly in Jute, no interest is charged directly but the creditor usually includes interest in his proforma charges and makes his offer accordingly. Thus the farmers have to pay indirectly "the bankers' interest on the merchant's capital in accepting the prices they receive from the Farias who in their term accept the prices offered by the Beparis." A similar practice is even now found in many parts of Bombay Presidency. This is the "Jalap" system under which advance is given against standing crops. The ryot makes an estimate of the outturn from his field and sells the same at a rate from Rs. 30 to 90 per Khandi of cotton lower than the Bombay rate and the middleman advances him 50 to 80 per cent of the value of the raw cotton bought and he undertakes the risks of unforeseen damage to the crop by untimely rain or frost, thus it is some form of crop insurance for the farmer but the prices offered are too low to be remunerative. Under the "Koonjro" system of financing in the Hyderabad District of Sind, the money-lender who is also a trader refuses to make anymore advances when he finds that the loan has grown to a figure of some size. He persuades the cultivator to take him as a financing partner on condition that the accumulated loan would run during the year free of interest. He makes also fresh advances when required and contributes towards a part of the expenses of cultivation, the major portion of which, however, is borne by the farmer himself. Out of the net produce, the money-lender takes away one half for himself but the entire produce is to be marketed through him and this gives him scope for making undue profits by cheating in weighment, and by the concealment of actual rates. The sale proceeds of the other half of the produce are not, however, returned to the cultivator but are credited to his debt account, thus he receives nothing at all for his labour on his land.

Various methods of giving short-period financial assistance to the grower have been developed in the different parts of the country. In the Tipperah and Noakhali Districts of Bengal, money-lenders do not usually finance agricultural

marketing but "at the time of the chilli harvest the indigenous bankers give advances or open current account on the system which is known as the "Dharti Sud". Under this the interest is payable on every Hat Day at the rate of 12½ per cent. Two Hats are held every week and thus it is a temporary help to petty dealers to facilitate the movement of produce and to the grower to hold up for the time to take advantage of the early fluctuations in the market. In Assam in the Gauripur area Aratdari business is carried on in the orange trade and a receipt called "Tuka" is given to the sellers which is an acknowledgement of debt. This receipt circulates freely in the market at a discount varying from ½ to ¼ per cent according to the condition of the money-market, and it is cashed within one week or 10 days. In a similar fashion in North Bihar, when sugarcane is delivered in cartloads in sugar mills, it is weighed and the farmer is given a note of weight, the counterfoil of which is kept with the mill. These notes are presented at the end of the week for encashment and during the week they circulate freely as credit instruments and are negotiable.

In addition to the village Mahajan, the village merchant and the Bepari, the landlord is an important source of agricultural market finance. In Madras villages the percentage of loans taken out from landlords vary from 16 to 25 while in the United Provinces it is easily above 25 particularly in the sugarcane areas. In some cases, the well-to-do farmers place funds in deposit with village money-lenders who advance to the growers and where these money-lenders do not combine trade with banking they induce the borrowers to market through those who have deposited with them. In China the procedure followed in financing small farmers who cultivate cotton in Hoppei "for well-to-do families to lend money to cotton dealers, who divide the loans into small sums and use them to make advances to the producers. The rate charged by the original lender is 12 per cent; the rate paid by the farmer is anything from 36 to 60 per cent."*

*R. H. Tawney—Land and Labour in China, p. 61.

The popular notion that because the farmer has taken loans from the village Mahajan or advances from the Bepari, he is completely under his control and has to accept any prices offered by him is not borne out by facts everywhere.

In this connection the figures collected by Mr. J. M. Lobo Prabhu may prove of some interest as illustrating the wide diversity of local conditions making any generalisation hazardous.

	Percentage of Cultivators Selling within 2 months of harvest.	Sold to creditors	Sale to village Mahajans on kachha hisab.
Meerut (Jalalabad)	66	50	21
Meerut (Hapur)	75	55	25
Allahabad (Kasia)	75	40	10
Agra (Ukhasia)	70	35	15
Beneras (Badausi)	60	40	20
Moradabad (Rajo-pur.	75	10	5
Saharanpur (Pathanpura)	70	35	30
Gurgaon	75	10	10
Ludhiana	70	30	18
Hosangabad (Bamni).	75	20	10

The enquires of the Indian Central Cotton Committee also "conclusively show that cultivators can and as a matter of fact, do hold the crops for considerable periods and further, that when they do sell early, it is not because they are financially pressed but because of their fear of a falling market and the risk of loss by fire and other causes. The only pressure to sell early was that exercised by necessity of paying Government assessment and in the Punjab of the payment of the water rates by the due date". In Khandesh although one-half of the crop was picked early only 11 per cent was sold then. While 60 per

cent of the crop was marketed early in middle Gujrat, the corresponding figures for Sind were 48, Punjab 20, and Madras 12. The cultivators of Middle Gujrat are better off than elsewhere and the high percentage of early sales is due more to speculative tendencies than to compulsion. The following figures illustrate the influence of borrowing on early sales :—

Area	Pcg of cultivators indebted at sowing	Pcg of early pickings to total outturn	Pcg of crop sold early to that picked
Khandesh	78	64	15.4
Sind	94	71	84
Madras	70	68	15

The freedom of sale of the indebted farmer is no doubt much restricted, but that is mainly due to his low economic condition which stands in the way of his keeping back his crops for a rise in the prices. Although one of the usual conditions underlying the loan is sale through the creditor and often at the stipulated price, this condition is rarely enforced were the marketing facilities are available to the ryot. In the Nandyal taluk of the Kurnool District only 29 out of 519 cotton growers who had to borrow gave a verbal undertaking to sell to the lender. In areas where the competition between the middlmen is keen or in periods of rising prices, the position is entirely reversed and they are anxious to lend or give advances to the growers to secure their crops, usually without interest and often without even any verbal obligation to sell. In other words in such cases the boot is on the other leg." The economic survey of village Gijhi in the Rohtak District of the Punjab where 53 per cent of the inhabitants have one acre holdings and a large percentage of them have ordinarily to borrow, "a cultivator in debt who sells to his creditor usually gets as good a price as a cultivator who is not in debt."

This is also supported by the Bihar and Orissa Banking Enquiry Committee. "Some cultivators deeply in debt are, at the risk of failing to obtain further credit when they need

it, obliged to sell to the creditor, but even then the price is nearly always the market price of the day." (p. 62).

In undeveloped areas or regions having no adequate means of communication the grower must be at a disadvantage in selling to the village Mahajan but this is so, not merely because he is a creditor. "Even remoteness may be counteracted by cohesion amongst growers or by the presence of an influential landlord."* In many cases the solvent cultivators combine in keeping up the prices and the poorer and indebted ryots take advantage of this. In a village near the Salt Range, for example, a powerful Zaminder insisted upon selling his Bajra at the rate of 12 seers per rupee when the market rate was 15 seers and the other farmers were quick to follow the example when it was circulated. Besides this the indebted ryots have very little security except the crop and they effectually use this economic weakness to secure proper prices for their produce as otherwise the creditor stands to lose everything. Thus the hardship of the cultivator and his great dependence on the middlemen is, much exaggerated, and it depends to a very large extent on the economic organisation to which he belongs, hence any reform in this direction should be to improve by means of Co-operative organisations his credit resources and to secure marketing facilities to him. Not only this, but through improved methods of financing the introduction of better agricultural methods and better varities of seeds may be achieved with success as was attempted by Messrs. A. K. Tennent and Company in the Rangpur District of Bengal when they with the assistance of the Department of Agriculture advanced money to growers without interest on condition that they would grow the recommended variety of tobacco and sell the entire produce at a fixed rate. The selection of growers, and supervision over the cultivation of tobacco and the curing of leaves were superintended by the Agricultural officers and in the contract better prices were fixed for the higher grades of leaves.

*Report of the Punjab Banking Enquiry Committee.

That the weakness of the producer and his inability to market his produce directly in Mandis is somewhat over estimated is clear when we consider that in the Punjab, the average percentage of the growers coming to Mandis is 50 at Lyallpur, 70 at Okara, 90 at Kotkapura, 75 at Ferozpur and 50 at Toba Tek Sing. At the Lyallpur market during the cotton season, the percentage of cultivator's carts arriving with their produce amounts on an average to 26. Cultivators living within a radius of 10 miles of Lyallpur marketed 46 per cent of their produce in their own carts.

Some estimate of the extent of the finance required for the marketing of the agricultural produce at some stage or other may be had from the figures of the marketable crops of two provinces of India :—

Gross Value of Marketable Agricultural Produce.

Punjab. In crores of Rupees.		Bengal. In crores of Rupees.	
1926	51.5	1920	62.9
		1924	74.1
1927	45.7	1926	66.7
		1928	102.0
1928	51.0	1930	52.0
		1932	32.7

In some important cotton areas of the Bombay Presidency like the Bombay Karnatak there are 11 cotton markets which handle approximately per annum, 2,86,000 bales of 400 lbs. each having an approximate value of Rs. 500 lakhs. In the Berar cotton markets the annual financial requirement is well over Rs. 111 lakhs and this amount has to be provided through a long chain of middlemen to the ultimate grower with a view to facilitate the movement of crops. The Bihar and Orissa Banking Enquiry have estimated that the value of the trade that stops at the primary or secondary market without leaving the area of production, is approximately Rs. 125 crores out of which the 2500 primary

markets claim Rs. 75 crores and the 500 secondary markets the remainder while merchandise valued at Rs. 25 crores goes out of the zone of production.

In moving the crop from the village to the nearest market, the Bepari or Faria in some cases employs his own capital and in others he borrows either from the ordinary money-lenders or Aratdars, Goladars or commission agents. In the wheat trade in the United Provinces, where the Beparis usually have little capital, they have a running account with the Adatya for short periods varying from 2 to 3 weeks on which interest at the rate of 12 to 18 per cent is charged if the Bepari fails to bring grain within a month of advance or at the end of the season when accounts are closed. In Chattisgarh in the Central Provinces advances are given for each trip or "khep" and interest is calculated at ½ anna per rupee per month or 37½ per cent per annum. In Assam, solvent cultivators occasionally finance the Beparis or other villagers engaged in this work and in some cases they borrow from the urban money-lenders at 18 to 24 per cent to re-lend at higher rates. In Bombay the itinerant buyers of cotton and tobacco are financed by urban dealers and commission agents and high rates of interest which they have often to pay, varying from 18 to 24 in the case of tobacco, often induce them to offer low rates to growers and to take recourse to unfair means. As usually the village sales are made on a cash basis, the Beparis require a large amount of fluid resources to effect the moving of crops. In the United Provinces, the ultimate burden of providing marketing finance falls on the Pakka Arhatiya as soon as the crops are harvested. Thus in the primary stage, at present, organised banking gives no assistance directly in moving the crops, and the cost of services at this stage, due to chaotic stage of marketing is consequently high.

In the primary stage also the high charge on account of interest makes a big hole in the profit of the cultivator. The rate of interest varies from 6 to 75 per cent in Sind to 9 3/8 per cent in middle Gujrat, where about 66 per cent of the loan were given out at that rate. The Co-operative

Societies have no doubt brought about a great reduction in the rates everywhere. It is however remarkable that in Sind where the Co-operative rates are quite low, 10½ to 11, as compared with the money-lender's rates varying from 18 3/4 to 75, the percentage loans taken from Co-operative Societies is only 7 as against 31 in Berar due to the fact that "these societies advance very inadequate amounts and besides this, their rules are so strict, requiring the return of the loan on particular days on the pain of the forfeiture of the livestock and other moveable property—that in order to be able to return these loans, the cultivators have sometimes go to the Sonar or Bania to get the wherewithal to pay the society."* The real rate of interest which the money-lender receives is however much higher than the nominal rate as he realises besides interest on the amount lent, discount, and other charges on the sale, makes undue gains in the weighment and in the suppression of actual rates and in failing to credit to the debtor's account the full amount. No matter when the crop is sold, the amount is rarely credited till April next and the interest on the amount goes on accruing. In Sind, in addition to all these, he gets the Sowcari Lapo. "The Sowcar's Lapo is usually reckoned as so much per nar or hurla in the lift irrigated areas. The usual rate is one maund of Bajri grain or equivalent amount of seed cotton, plus 1 "Boro" of Bajra earheads, plus 10 to 20 bundles of grass."

The Aratdar, Dalalidar or commission agent is at the apex of the intra-district marketing organisation and his functions include, the assembling of produce at big centres, financing of the marketing process, and storage of the produce for a rise in prices and preparation and transport of the produce to the consuming or exporting points. These middlemen start mainly with their own capital or deposits by their friends and relations on which the interest at the Mandi rate (varying from 9 per cent at Gazipur and 11 per

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*Report of an Investigation into the Financing and Marketing of Cultivators' Cotton in Sind, p. 18.

cent at Hapur) is paid. In other cases they get loans from the joint stock banks, Shroffs or bigger Arhtis, also on railway receipts and Hundis.

The Banks grant accomodation (1) on the pledge of produce stored in the godowns of the Bank or of the merchant but under the control of the Bank, the produce in every case being insured. In the former case, the borrower is liable for depreciation of stock or fall in value and he may be called upon to make good the deficit. The maximum amount which is advanced in case of groundnut or cotton in south Madras is 80 per cent and the rate of interest varies from 6 to 8 per cent. In case of grain stored in the merchants' godowns in the Mandis of the United Provinces the Joint Stock Banks lend with proper precautions. At Ghazipur for example when a Khatti is filled, a statement giving the details of the quantity and cost called Parcha is sent to the Bank. On the basis of this the Bank advances 65 to 75 per cent of the face value of the Khatti and a stone with the name of the Bank inscribed on it is fixed on the Khatti signifying its possession. With fluctuations in the value of the grain mere cover is demanded. In the Punjab the commission agents are financed by big Mahajans and they borrow from the Banks on the security of grain godowns with a storage capacity of about 1,000 maunds. The borrower has to hand over the key of the godown to the Bank and he obtains an advance of 75 to 80 per cent of the value at 7½ per cent interest.* In the tobacco trade in the Guntur area, the merchants get little assistance from the banks and have to borrow mostly from Marwaris who taking advantage of any financial stringency in the local market demand even 50 per cent for a week's loan. The delivery of possession of the godown to the Bank is often considered derogatory as it results in a lowering of credit of the merchant in the market, hence he very often does not avail of this assistance.

The Aratdar arranges with his Shroff or Bank to allow him the required accommodation in the form of a demand

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*Darling—Wisdom & Waste in the Punjab, p. 126.

pro-note or a running account or a Muddati Hundi. The Bank may demand a second signature on the document and in the cases of Muddati Hundis the Shroff making the advance may endorse it to a Bank for discounting. In groundnut and cotton trade in Coimbatore the commission agents are given acommodation on the security of pro-notes while ginning and decorticating factories accept deposits of the produce of the farmers and give advances on them upto 75 per cent and in their turn obtain financial assistance from the Bank on this security. The Banks usually obtain also the signature of the cultivator or sub-dealer in their registers for their stocks deposited with them and lend at 12 to 15 per cent rate of interest. The Banks thus give great assistance by discounting Hundis based on genuine trade transactions and give advance on pro-notes on personal credit to approved traders.

In the case of movement of produce to distant markets by railway or steamer the merchant draws on the purchaser for funds. The sale price may be absolute or dependent on the quality agreeing with the sample. In the former case he may draw upto full value but in the latter case it is usual to draw for 90 per cent only. Funds may be drawn by Darshani Hundis with the Railway Receipt or without it and these are discounted by Banks. In Madras Presidency there is a large coastwise seaborne trade in paddy. The small merchants after shipping the goods draw a Hundi or Bill of Exchange on the consignee, which after being accepted is discounted with local banks. It was pointed out before the Bengal Banking Enquiry Committee that the European firms engaged in buying and baling of Jute can draw the full value of the goods against a railway receipt or bill of lading from any branch of the Imperial Bank whereas the Indian merchant does not enjoy this privilege and he is not given advance against bills of lading issued by the Indian steamship companies. This denial of banking facilities is a great hindrance as he is left to his own resources and he has to remit funds through the Imperial Bank or the Post Office which involves much loss of time.

For the financial assistance rendered by the different grades of middlemen the remuneration realised by them appear to be excessive in view of the great risks they have to undertake and the absence of any organisation in the marketing business. The usual rate of interest varies from 9 to 12 per cent in Assam and 15 per cent in the Central Provinces. In Madras the Imperial Bank has to a large extent displaced the indigenous banks up on a big scale the business of discounting Hundis and granting loans on produce. In the Punjab where the commission agent has to supplement his own capital with loans the rates in the case of small traders are 9 to 12 per cent and in the case of big traders 6 to 9 per cent. The Amritsar Grain and Sugar Association gives advances varying from 5½ to 7½ per cent and up to 80 per cent of the commodity.

In moving the produce to the ports, the bigger merchants of the town markets after buying the goods with their own funds sometimes despatch it to port for sale direct to exporters or through Aratdars and they may be paid by Hundis or may receive acommodation fom local bankers, e.g., Multani bankers in Madras Presidency borrowed on their personal credit and it is covered by a Hundi which is sent to the port for collection on the sale of goods at the port. These merchants also obtain assistance from the Imperial Bank by the arrangement on the security of their own funds. The exporting firm on shipping the commodity gets advance from foreign Exchange Banks on the strength of the shipping documents, or if its credit is sound without these or on "clean" bills.

In the export of the wheat or cotton, many exporting firms have their own organisation for the collection of the produce and moving it from the local markets to the port. They have head offices at the ports with warehouses for the handling and the shipping of the grain and many of them have net-works of branches in the different Mandis, each of which is managed by a local agent who is responsible for the purchase, handling, storage and transport of the produce,

e.g., wheat. The privilege of acting as brokers of the exporting firm for a district is usually given out by contract to a large broker who employs a large number of brokers or Dalals to assist the agent of the branches in his purchases. The wheat exporting firms make cash purchase by paying ready cash on the spot. The second method is known as the Karachi Pass by which the Agent enters into an agreement with a local merchant for the delivery of wheat at Karachi within a stipulated period. The responsibility of assembling and transporting the grain is with the merchant who, on making over the railway bill of lading to the Agent, receives 90 per cent of the price and the balance is paid after the exporter has examined and weighed the consignment at the port. In the third method, the Agency Pass, the important difference is that the local Agent checks the weight and decides about the quality and thus it is more popular with the traders as the transaction is complete on the spot. The actual supply of funds is done by local bankers called Shroffs, who act as agents for the exporters and draw bills on them for subsequent payment.

This class of Shroffs have played a very important part in the history of Mughal India as money-lenders and bankers, financiers to the Governments and as the apex of the credit system of the country and their influence on shapping the course of political history of the time was no less great. With the coming of the English and the development of the western system of banking they have declined considerably but have maintained their existence by carrying on trade on their own account and the financing of the trade in addition to the normal business of money-lending. They form the only connecting links between indigenous banking and the Indian money market and they draw Hundis themselves or endorses the Hundis of other bankers and traders and re-discounts them with the town bankers or the Joint Stock Banks. The financial assistance which the Calcutta and Bombay Banks and indigenous bankers give to the importing and exporting firms, and commission agents are passed on to the Shroffs who also lend their surplus funds in the market when necessary. They utilise the services

of the Imperial Bank in making remittances to places particularly where the facilities of remittance through post or Darshani Hundi are not available, but where a Hundi exchange exists, the Shroffs prefer it to the Imperial Bank facilities. In rediscounting of bills and Hundis, the Shroff can derive much assistance from the Imperial Bank as he alone can satisfy the condition of two signatures.

The large exporters like the Ralli Brothers and the Japanese firms by their own organisation try to eliminate the chain of middlemen and supply the short period finance required for the moving of the produce themselves. In South India some exporting firms provide temporary financial acommodation to Dalals and middlemen under what is locally known as "Unfixed Contract or Rate" system. Under this, the wholesale merchant delivers the commodity to the agent of this firm, price is not settled then and the dealer is given temporary assistance on the security of the goods. No interest is charged and the dealer has to settle his accounts with the firm within 45 days of the first advance.

Boyle has well remarked that "credit for agricultural marketing has been and still is, largely a question of credit for the dealer." With the forging of new links to the chain of the distributing services, new methods of the manufacture and supply of credit have been developed in other countries an account of which serves to indicate the extent of our deficiencies. In the United States of America the cotton dealer gets finanical aid on his promissary note, warehouse receipt, compress receipt, bill of lading, banker's acceptance and trade acceptances. The Banker's acceptance is a draft drawn on and accepted by a bank and it carries the lowest rate of interest. When a bank affiliated to the Federal Reserve system endorses it, it can be rediscounted in any of the 12 Reserve Banks. "The purpose of the Banker's acceptance is to finance imports and exports, the domestic shipment of goods, the storage of readily marketable staple accompanied by a warehouse receipt. They may have a maturity from 3 to 6 months when based on

proper documents. In the case of cotton the documents would be (a) the warehouse receipt, (b) grade certificate and (c) Insurance receipt." The trade acceptance, on the other hand is a bill drawn on a buyer of cotton and accepted by him for payment within a period of 9 months.

Until all the units in our marketing system are strengthened it is of course not possible to expect to secure all these facilities in finance, but a move in that direction has been foreshadowed by the great emphasis laid by the Banking Committees on the creation of Licensed Warehouses and the regulation of markets in general. Dr. P. J. Thomas in his illuminating minute of dissent, has pointed out that "this system of financing marketing operations must be replaced by short term credits which will keep money more mobile, bring down the rate of interest and enable the owner of the produce to market at the most auspicious time and the highest available prices. This is only possible by the creation and discounting of negotiable paper at every stage of the transaction."* One method of achieving this, is by developing "a rediscounting system with a growing bill market" as has been achieved in the United States of America by the passing of the Federal Reserve Act of 1914 which has knit together under one organisation 30,000 independent Commercial Banks of the coutry. This system facilitates the manufacture of short term credit by the purchase in the open market of the banker's accepances maturing within six months which are drawn by growers or by co-operative organisation of producers of non-perishable staple agricultural products. The Agricultural Marketing Act of 1929 has provided for the creation of a one-half billion dollar Revolving Fund from the Treasury to give loans to qualified Co-operative Marketing organisations and other farmers for short periods sa as enable them to hold and control seasonal and short period surpluses of produce with a view to avoid an unnecessary glut in the market. The new Farm Credit Administration set up under the Agricul-

*Madras Banking Enquiry Committee Report, p. 279,

tural Adjustment Act of 1933 has further centralised the dealing of short-term credit. It is to be expected that in India with the organisation of Licensed Warehouses, Co-operative Marketing and the creation of the Reserve Bank of India, marketing finance will be better organised, and made cheaper than what is now, for as Dr. Thomas has pointed out, "a proper co-operation of credit supply with marketing is the Sine qua non for such improvement."

CHAPTER VII

WEIGHTS AND MEASURES.

The problem of marketing in India has become all the more complicated owing to the bewildering diversity of the weights and measures used in the different parts of the country. The variations are not only regional but on a commodity basis as well and are perhaps survivals of the early days of the rule of the East India Company in Bengal when in the same locality there was a great diversity in the medium of the currency used for the purchase of different commodities.

The standard seer of 80 tolas is no doubt in use in towns, railway stations and the important markets but in the village markets the diversity is very great. In the District of Birbhum in Bengal, in rural areas there are three kinds of weights :—

(1) Kacha seer weighing 58 10/16 to 60 tolas.

(2) Batkari with varying values:—
58 tolas in Bolpur Thana used in the rice trade.
72 tolas in Ilambazar in the Gur trade.
80 tolas in Sakulipur in Oilcakes.

(3) Pai weighing 110 tolas in Rajnagar for the trade in pulses and weighing 75 tolas in Sakulipur for various commodities. In the Purnea District of Bihar although the standard seer of 80 tolas is in general use yet for the weighing of gram, tobacco and jute seers having different weights are used in different localities, e.g., in Araria it is 64 tolas, : Dharampur 68, Kishanganj 88, and Kadwa 90. In the weighing of mustard oil in Kishanganj a seer of 132 tolas is used. In the Ranchi District two different kinds of weights are used in the Panch Parganas, viz., Solahi seer equal to 16 Gorakhpuri pices and the Athaisi kachi Ser

equal in weight to 28 copper pices. In the Gaya District the grain is measured in Paseris equal to five standard seers of 80 tolas each but the Paseri actually varies from 6 to 7½ seers while the range of variation of the Seer is from 42 tolas in Nawadah subdivision, 48 in Tikari and Rajauli, 56 in Pakribarawan to 84 in Atri.

In Bihar the local weights are based on Gondas or sets of the old Gorakhpuri pice which "are lumps of copper cut from a copper bar without any definite shape or size. No two of them are equal in weight, shape or size."

An investigation made by Mr. B. N. Sarkar into the frequency of different systems of weights in Bihar shows that in out of 1426 markets enquired into 497 use 48—55 tola seers, 202 use 56—63 tola seers, 313 use the standard seer of 80 tolas and the variation of tolas in the seer is from 32 to 105. Thus "the local weights vary round about 50 tolas a seer or about 100 tolas a seer except where the standard weight has been pushed in from above. I can offer no reason for this choice of the people of a seer of 50 tolas or its multiple except one casually offered by an old villager. A seer of about 50 tolas or 10 chattaks of rice or other grains is considered to be a full meal for an adult agricultural worker or a peasant proprietor. A seer of this therefore helps one to distribute grains to labourers and a housewife to take out rice for cooking for the members of the family. This may be one of the most important factors in keeping the Katcha weight going."*

In the weighment of cotton in the Bombay Presidency the unit is the Khandi of 784 lbs. of lint but in Khandesh it varies from 160 to 250 lbs. and in the southern part of the presidency the unit is a Nag of 336 lbs. One maund of cotton is equivalent to 72 seers at Nardana, 50 seers at Sherpur, 40 at Navapur in West Khandesh, 80 at Pachora, 72 at Dondaichi, 48 at Jalgaon, 25½ at Shendurni, and 21½ seers at Bodwad in east Khandesh; 16 to 19 seers in the Yeotmal District, 15 seers in the Amraoti

*B. N. Sarkar—Paper on Weights and Measures of Capacity in Bihar.

District and 20 seers at Asalgaon (Buldana District) in Berar.

In the Madras Presidency the unit is a Khandi of 500 lbs. but in the area where the "Westerns" cotton is grown the unit is a Nag of 312 lbs. In the Central Provinces the measures e.g., "Mani", "Kuro" & 'Khandi' have a different significance in different areas with great variations in weight. The Khandi of uncleaned cotton varies from 28 maunds to 20 maunds.

In various parts of the country baskets or pots are used for measuring grain and there is a great variation in the capacity of these measures. In Western Burma rice is measured in baskets, the capacity of which varies from District to District "according to the number of condensed milk tins, the contents of things they will hold". In Assam Valley paddy, mustard and jute are measured in "Doon" baskets. "A Doon is a wicker-basket of which the size varies somewhat but the standard size contains 372 seers of paddy." In the Ranchi District of Bihar grain is seldom weighed but is measured in Pailas, the size of which varies in different localities, but three varieties are well-known, "Chhapnahi" paila (equal in weight to 56 copper pieces), Baragandi Paila (48) and Sawai paila. In Talagarj (Punjab) weighing is done by means of a choah (a measure made of iron or wood containing 3 seers of wheat).

The evils caused by this diversity are further aggravated by the exploitation of the producer-seller by the middleman and the deliberate use of incorrect weights which is partly acquisced in and partly undetected. The lack of bargaining power of the cultivator to a large extent is responsible for the adoption of these unfair methods. In Assam sometimes the Marwari money-lenders make advances just before the harvest on condition that the borrowers would pay them one Doon of paddy over and above the number of Doons which would be due at current rates after the harvest. The money-lender's Doon is usually bigger in size than the standard doon and the borrowers know it. In some areas

there is a common practice of using different measures for purchases and sales and it is always to the advantage of the buyer. The Assam Banking Enquiry Committee have mentioned that "the leading trader near Baruk-Barua told us that he bought with a nine-kathiya doon and sold retail with a eight-kathiya one". "In Poona the merchant's buying unit for Gur is 250 lbs. whereas his selling unit is 240 lbs."*

Even where correct weights are used in many places a market custom has developed by which extra payments or deductions have been recognised and this adds to the profits of the middlemen. In Bihar, the buyer of tobacco is entitled to take a bundle for every maund weighed. A more serious evil is the use of short weights and the lack of any machinery to check it effectively. The enquiry into the weights used in Mandis of the Punjab held in 1928 by the Punjab Board of Economic Enquiry have revealed that only 50.8 per cent of the stamped and 12 per cent of the unstamped weights were correct. New weights sold in the bazar are usually incorrect. "These bazar weights usually made in Agra, are of cast iron and it appears factories manufacturing them do not pay much attention to the quality of the material used with the result that weight from the same mould vary considerably with every smelting". It was further noticed that there was a tendency for weights of 5 to 40 seers to be overweight and for the smaller ones to be underweight. Various devices are adopted to increase the traders' profits even when standard and stamped weights are used. A shopkeeper "had inserted lead into the hollows which are generally to be found in the lower surface. He admitted that he used the heavy weight when he was purchasing commodities like Gur, wheat, cotton from the cultivator's womenfolk or if he were weighing produce in exchange for which his customers wished to purchase other goods from him."** Mr. M. L. Darling has pointed that in the Punjab "cheating is facilitated by the substitution of an

*Report of the Bombay Banking Enquiry Committee, p. 109.
**Economic Survey of Tehong Village, p. 174.

iron topa or measure for the wooden vessel always employed in the past. The bottom of an iron topa can easily be pushed in or out and when pressed inwards, its contents weighed one chhatak less than before". In course of the enquiry into the marketing of cultivator's cotton in Sind a special inspection of the weights was made. "It was found that in most cases the Sowcar Banias when purchasing cotton from the cultivators did not use the correct iron weights at all (although they used them when they themselves sold) but made up approximate weights by putting in a bag pieces of stones and bricks. Thus they contrived to get from the cultivators between 90 and 96 lbs. for a maund whereas the correct standard of weight is 86.4 lbs". The use of stone weights of irregular sizes is also common in villages and in a majority of cases these are short in weight. A Bania using these weights is looked upon with suspicion and this has given rise to a common saying in the Punjab: —

"Bina parhaya Bania, aur pathar ka bat,

Kubad Brahman, le parhoa J'at".

(An uneducated Bania, and stone weights are as bad as an uneducated Brahman and a literate Jat).

Weighment is usually carried on in hand scales, although in the larger markets Beam Scales are also used. The trader prefers the hand scale as it helps him to shift dirt and to detect large scale adulteration, while it gives him unlimited opportunities for cheating in weighment. In the Montgomery District of the Punjab it was noticed on enquiry that out of 139 hand-scales checked, only 16 were found correct whether loaded or unloaded. Mr. B. N. Sarkar mentions that "the Baniyas always keep one side of the scale heavier than the other and use this difference to their advantage while buying or selling. For example before weighment starts the cultivator heaps the corn in front of the man. The Bepari then corrects the balance by putting some pieces of stones on the lighter pan. Then just before beginning to weigh, he puts his "Muretha" (head gear) over the weights on the scale pan and bends down as if to pray

to Mahadeo for success in business and thus cleverly manages to put some more stones on the pan, these stones having concealed all the time." Another common method is to use a stiff cord for the central string which the weighman holds in his hand and to manipulate the scales by the pressure passed through the cord. Mr. Sarkar further points out that "a kind of balance known as Kanadandi is purposely made and sold by the makers only to trusted Banias. In this balance the central hole in the wooden bar is made a little away from the mid-point so that one side from the centre is a little farther than the other, though it does not appear so on casual observation."

In some parts of Orissa, a peculiar type of hand-scale is used which has only one pan and the weights are suspended from the beam and quite correct results are obtained. The Royal Commission on Agriculture have recommended the use of platform scales and this is being adopted in the bigger markets.

Among the disadvantages arising out of this medley of weights the most important is the handicap under which the cultivator suffers in ascertaining correct market rates. In the village the prices are quoted in terms of some units of weight while the rates in the terminal or central markets are quoted in terms of the standard maunds or seers, thus it becomes difficult for the illiterate grower to follow the fluctuations in the prices of the bigger markets.

From the brief survey given above it will appear that no advance towards orderly marketing is possible without a standardisation of weights and measures in India. The Government took up this matter as early as in 1870 and the decimal system was accepted as the basis and the Indian seer was considered as the equivalent to the kilogramme. The maund of 40 seers of 80 tola seer was by executive notification adopted as the standard, but nothing further appears to have been done to enforce it.

The Silberrard Committee in 1915 recommended the adoption of a uniform system of weights for India based on

the 180 grain tola. The Government of India have accepted the principles underlying the report but have not attempted to enforce a uniform standard for India and have left it to the Provincial Governments to lay down standards suited to their local requirments. The Royal Commission on Agriculture have practically endorsed this action of the Government. "We fully realise the obstacles of an all India legislation presented by the local trade custom and of local tradition which is probably more powerful in this than in almost any other respect. The only hope of advance appears to us to lie in action within the limits of each province." (p. 397). Custom no doubt plays a large part in resisting the adoption of the new standard but the continuance of payments of wages to agricultural labourers and village artisans to a large extent contributes to this also. In Bihar the usual rate of wages for landless agricultural labourers is three seers of grain per day which converted into standard seer would amount to 1¾ seers. Any reduction of this customary three seers would be looked upon with suspicion. Mr. Sarkar cites the instance of Gangpur State where "even though the standard measure introduced by the state has entirely replaced all other measures from the markets, the 'Bhuti' or servant's wages are still paid in grain. Payments in kind are made to blacksmiths, barbers, etc. and also in case of certain endowments".

The Indian railways, have laid down an uniform standard all over India and this has to a large extent given a healthy stimulus to the adoption of an uniform standard by the trade. There is no doubt that local conditions stand in the way of improvement but it is ultimately a question of competition and the bargaining power of the cultivator. Where he is weak and the demand is not strong no amount of legislation can save him from the wills and trickery of an avaricious trader as his very weakness makes him a willing dupe, but where conditions are better, he will not suffer any trader to take any undue advantage and with some legal protection he can be assured of getting correct weights. The Assam Banking Enquiry Committee have quoted the evidence of a trader which may be cited here to illustrate

the difference caused by the existence of competition. "Growers bring their jute after weighment and their weighment is generally correct. We take two seers in excess for every maund so far as cultivators of the Bishnath side are concerned, for jute growers of Tezpur side we do not take anything in excess". In Giji village (Rohtak Dt.) the cultivators who wish to protect themselves insist upon the use of their own weights in their dealing with shopkeepers. Thus the improvement in the bargaining power of the grower will give us the real solution of this problem. The lead given by the Government and the railways is slowly permeating and already in the urban market the standard 80 tola seer has come to rule, and it is doubtful how far the pace downwards can be stimulated by an all India legislation. In Bihar the standard weight of 80 tola seer has made considerable progress in Chota Nagpur as well as in town markets in other provinces. Out of 322 markets examined in the District of Ranchi, Singbhum, Hazaribagh, Sonthal Parganas and Purnea as the 80 tola weight was found to be in use in 276 markets. Dr. Sengupta has remarked that "if the country has survived the shock apprehended by the oppositions to the Sarda Marriage Act, there is no doubt that the rural public will only welcome such a beneficient measure"* The very experience we have had of the success of the Sarda Act in checking chil marriage or of the Usurious Loans Act in combating the evil of usury does not enthuse us at all in suggesting general legislation in this case. In various parts of the country the Municipalities' Market Committees and other local bodies have for a long time possessed wide powers for prescribing and enforcing rules about weights and measures, but so far these efforts do not appear to produce any great results. All such attempts have failed at the point of devising an efficient and cheap system of inspection. In the Punjab out of 1407 scales tested in 5 Districts about 69 per cent was found to be incorrect and 29 per cent of the weights were not correct as well. "Inaccurate weights appear to be so general that it is difficult to deal with the

*Report of the Bengal Jute Enquiry Committee, 190.

evil." As many as 65 local bodies in that province have framed rules for the regulation of weights and measures but it has not been possible to arrange for their proper inspection or to give effect to them on any big scale. In Bihar, the Municipal Act has empowered the Municipalities to prescribe the standard weights and measures and to provide for the inspection of the same. Only 28 Municipalities out of 50 have taken advantage of these powers.

In contract to this a description of the energetic steps taken by the military authorities at Dharamsala cantonment (Kangra District) may be given. "The Bazar Committee consists of a Subedar Major, a Subedar, a Jamadar and the Bazar Chaudharies, who check the weights and scales of all shopkeepers. Incorrect weights are put right for a small fee by a blacksmith nailing on them pice or pies and the shopkeeper has to show the corrected weights to the Chaudhari before using them. Every shopkeeper has to deposit Rs. 100 with the Cantonment authorities, and this sum is liable to confiscation for fraudulent weighing or breach of other rules."*

The Punjab Banking Enquiry Committee have laid their fingers on the real cause of failure. "A serious difficulty is that a set of standard weights at the Mint costs Rs. 534-1-0 which most committees regard as prohibitive." If therefore every market has to be provided with one set of correct weights the total cost would be too high even for the Government to bear and in addition to this an Inspectorate possessing adequate training in this work, will have to be maintained. In case of such commodities as jute or cotton the transactions of which in rural areas are over after harvesting season, these inspectors will have very little work after the season is over. The desideratum between a policy of non-interference and standardisation by an all-India legislation lies therefore in the prevention of fraud and cheating with the aid of the existing criminal laws, the enactment of legislation for special areas where it may be

*Condition of Weights and Measures in the Punjab—Punjab Board of Economic Enquiry 1936, p. 25.

possible to enforce it, and educating public opinion. The Central Provinces have led in this direction by the Weights and Measures of Capacities Act (II of 1928) which lays down a scale of standard weights and measures, and authorises the Government to enforce standardisation by notifying areas for the purposes of the Act. Bombay has also followed with the Cotton Gins and Pressing Factories Act which provides that the Local Government may make rules regarding the weights and scales to be used in Gins and Presses and arrange for their proper inspection.

The Bombay Government have also made a more comprehensive attempt to tackle this problem. In 1932 the Bombay Weights and Measures Act was passed by which the standard weights and measures have been divided into 3 classes (a) primary standard to be kept with the Government, (b) as it would not be possible to use the primary standard for testing weights and measures in actual use, a secondary standard has been devised. These weights would be made at the Mint and kept in the custody of the collectors, District, Local Boards and Municipalities. (c) The working standards would be made by any agency approved by the Government at a low cost and these would be available for checking work in village markets as well. The Government have been empowered to extend the Act to any part of the Presidency and it has been provided that in the notified area the Government or the local bodies would appoint Inspectors of weights for verification and checking of weights and scales and for this purpose they have been empowered to charge fees. The fraudulent use of weight scales, possession of false weights, and forging or counterfeiting a stamp used for the purpose of stamping a weight have been made penal offences.

With an increase in the number of regulated markets in important rural centres, the use of standard weights and measures would gradually increase. Meantime an intensive effort should be made by the Government and the trading interest to expose and check cases of fraud and trickery.

The expensiveness of the standard weights has encouraged the private manufacture of low priced weights in various parts of the country and as these pass as stamped weights, the confusion has been further aggravated. In the United Provinces the main centres where weights are manufactured are Agra and Aligarh and the price of a set of weights of 8 pieces is below one rupee. It is said that in making the weights sand is mixed with the molten iron before casting "so that weights from the same mould would deviate at every smelting according to the amount of sand added". Weights made at Phagwara in the Kapurthala state have a wide circulation in the Punjab. These weights bear the Moon and Star stamp, the heavier weights being rectangular in shape. In Dera Ghazi Khan metallic weights are made for denominations up to 4 seers while heavier weights are usually of stone. The investigation carried out by the Punjab Board of Economic Inquiry shows that 48.8 per cent of the stamped weights is incorrect, out of which 41 per cent is below the standard weight. Inaccuracy of the stamped weights is as high as 58.8 per cent in villages as compared to 46.1 in Mandis. The 5 seer denomination is the unit of weighment in all grain markets but 58 per cent of these weights was found to be incorrect of which 43 per cent was underweight.

It has been pointed out by Mr. Sarkar that the 80 tola seer weight is not quite suitable as under this system the cultivator finds it difficult to calculate prices as it does not fit in with the existing currency system. A new standard in conformity with the local requirements is therefore required. The adoption of a 50 tola seer and 64 seer maund may prove more acceptable as it would be easy to calculate the price of one seer in terms of the pice and the maund containing 3200 tolas (64 x 50) would be of the same weight as the railway maund (40 x 80), thus the customary village standard would be brought in a line with an All-India standard.

Under the Government of India Act of 1935 the question of standards has become a Federal subject and

advantage of this has been taken by the Associated Chambers of Commerce who on the motion of Professor W. Roberts passed a resolution in December 1936 urging the "Government of India to introduce legislation with the object of fixing uniform standards of weights and measures throughout India. In the discussion which followed however the 80 tolas seer found favour and it was suggested that the Government of India should by legislation lay down an All-India standard to be later on adopted by Provincial Governments according to local needs starting with the main towns and selected rural areas."

The Bombay Act came into force on 1st August 1935. The merchants at first were unwilling to meet the initial expense of obtaining verified and stamped weights and weighing instruments or to pay the recurring cost of verification and stamping which amounts from 3 annas to 9 annas per unit and is payable once in two years, but now they "are free with their appreciation of the advantages which have resulted from it". Thus sweeping reforms or harsh legislative enactments are not needed, once the lead is given by the Government organised commerce will not hesitate to adopt it now that its utility is gradually being realised. We may, in the words of Sir Edward Benthall, hope that "where Akbar has failed Lord Linlithgow would succeed".

CHAPTER VIII.

STORAGE.

In every country the middlemen who hold up a part of the produce just after the harvest for sale at a later date are looked upon with distrust and suspicion as profiteers, but the service which they render are as important for the producer as for the consumer. Secretary Wallace has well-remarked that, "the business of accumulating and storing perishable products in times of flush production, preserving them safely, and distributing them in time of scarcity is necessarily a part of production and equal in importance and dignity. "By holding back a part of the surplus at harvest time the middlemen prevent a sharp fall in prices of commodities so that the producers share in the benefit and by letting out produce from the store in seasons when the prices are normally likely to rise sharply, they check the rise and bring about some stability in market prices which benefits the consumer immensely." Thus a well organised system of storage is a distinct gain to the producer and the consumer.

In India, however no such system exists and the storage work that is done, is mainly performed in the self-interest of the producer or middleman and although the resultant gain is shared by all the units of the marketing organisation, the proportion in which the gain is divided differs widely according to the capacity of the units. This explains the fact that the fluctuations in the post harvest prices of many agricultural commodities in India are so great.

Table showing average wholesale prices of some staple crops in south Bihar per maund.

	Common rice.						Wheat.					
	Nov.—Feb.						Mar.—May.					
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
1920	6	8	0	5	0	0	6	10	0	5	0	0
1921	6	3	0	5	12	0	6	10	0	6	0	0
1922	4	4	0	4	6	0	9	8	0	6	3	0
1923	5	0	0	4	5	0	5	0	0	4	8	0
1924	5	11	0	5	8	0	5	0	0	4	6	0
1925	4	11	0	4	7	0	6	11	0	5	10	0
1926	6	11	0	6	2	0	6	6	0	5	2	0
1927	7	4	0	6	4	0	5	11	0	5	0	0
1928	6	11	0	6	2	0	5	11	0	5	5	0
1929	6	2	0	4	14	0	5	1	0	5	2	0

This marked fall is not so noticeable in the case of commodities entering more largely into the foreign trade, e.g., Linseed, Jute, etc. as the following table will indicate.

Wholesale price of Linseed in South Bihar per maund.

Year.	Highest price.			Lowest price		
	Rs.	As.	P.	Rs.	As.	P.
1920	12	0	0	11	0	0
1921	9	0	0	8	0	0
1922	10	0	0	9	8	0
1923	10	8	0	10	0	0
1924	9	0	0	8	6	0
1925	9	8	0	9	1	0
1926	8	0	0	7	9	0
1927	7	0	0	6	6	0
1928	7	7	0	6	9	0

Storage is performed at different stages, in the village by the grower, in the small markets, in the bigger markets from where the exporters make their purchases and also in the terminal markets. The amount of storage work depends on the keeping capacity of the commodity itself, the economic position of the producer and the facili-

ties for storage. Wheat is difficult to keep for a long time as weevils multiply rapidly by the high air temperatures of summer months if the grain is not perfectly dry and it is further damaged by the humidity during the monsoon months. Tobacco does not keep well and it deteriorates after one year. No banker would advance on Tobacco more than 30 per cent of the value as the tobacco usually develops mildew after a period and the risk of damage is great. In the case of Jute, it is not possible for the grower to provide fire-proof store-houses hence he finds it safer to sell it up after harvest and avoid the risk of destruction by fire, mice and white-ants. Although in many cases, the grower is compelled to sell up after the harvest to pay up his mahajan and meet the numerous demands on his purse, wherever possible he sells the less remunerative crops for this purpose retaining the more valuable ones for obtaining better prices. In the Punjab, the grower sells Toria immediately after harvest to pay land revenue and holds up the cotton for a longer period. The spring instalment of land revenue is paid out of the sale of Toria and Gur and occasionally by the sale of wheat as well.

In the villages, wheat is stored in kothas or rooms, the floor of which has been previously covered with sand. In some Punjab villages it is also kept packed in large gunny bags called Thekas, each containing 50 to 120 maunds of grain. The Thekas are kept in the middle of the room and some sand is usually mixed with the grain with a view to increase its keeping quality. In the U.P. the grower keeps his grain in earthen pots, bins or receptacles made of matting, mud and wicker work and in some villages in large earthen cylinders inside their rooms.

In the Attock District the usual method of storing wheat in the villages is in earthen bins called Sakaries. In the Ferozepore District wheat is stored in (1) Gunny bags (20 per cent of the storage is done in these), (2) the corner of the bed room (40 p.c.), (3) Kothi (12) which is a combination of four earthen vessels with separate doors, (4) Bharoli (12 p.c.). "A Bharoli is a cylindrical bin with concave sides;

the top is narrow and generally covered by an earthen pot and there is a small outlet near the bottom which is kept closed by an earthen or cloth plug", (5) Parchhatti (3 p.c.) which is an earthen vessel supported on wooden brackets fixed to the wall, (6) Chauras (2 p.c.). "It is a square built earthen vessel, well plastered with mud and cow dung both inside and out of it. The grain is poured through a hole on the top and taken out through a small outlet near the bottom. It is placed on supports one or two inches high in a corner of the room, but not touching the wall on any side as this keeps the grain cool and also makes it less liable to attacks by insects and rats".

In small town markets the grain is kept in kothas made of bricks having a capacity of 150 to 300 maunds. Inside these kothas wheat is stored both in bulk or in large sized gunny bags called Theks. A great advantage of the kotha is the comparative immunity it has from fire, although much damage is caused by the damp, weevils and rats. "A thin layer of grain alongside the floor or walls is often damaged by the mould on account of dampness. Weevils infest the crevices of the walls and roofs of these kothas and multiply very soon in the new grain". One method of checking the weevils is to whitewash the walls at frequent intervals but this is done only once a year at Diwali and the damage caused to the grain may be estimated at about 2½ per cent per annum.

In bigger towns, storage is done in Khattis, which are square or oblongshaped pits sunk into the floor with the base wider than the mouth. They are lined with straw or chaff and the grain is stored in bulk and is covered at the top by a covering of straw, earth and thatch or by a stone. The storage capacity varies from 250 to 400 maunds and the monthly rent is from Rs. 5 to 10. The following table gives an idea about the cost of storing wheat in the Punjab:—

Market.	Rent.	Cost of cleaning.
Lyallpur	Rs. 2 to 3 per kotha per month.	Rs. 0 0 3 per bag.

Market.	Rent.	Cost of clearing.
Okara	Rs. 1 to 2 per 100 bags per month.	Rs. 0 0 3 per bag.
Amritsar	Rs. 7-8 per kotha per month.	As. 0 8 0 per Kotha*

At big grain markets like Hapur and Ghaziabad, Khattis having a storage capacity of 400 to 600 maunds are common. They are made in big enclosures with walls, called Ahatas, or in pavements in front of the shop of the Arhtia. In the United Provinces, at Muzaffarnagar, one of the most important wheat markets of the U.P. the usual method of storage is in underground pits or Khattis. The water-level is about 9 feet from the surface and the damage due to dampness ordinarily is not inconsiderable while in 1933 heavy damage was caused by heavy rainfall. "The estimated damage to the merchants was in the neighbourhood of about four lakhs of rupees. The very existence of the wheat market in Muzaffarnagar was threatened as a result of this new danger, for large stocks of wheat had to be destroyed and wherever poor people used the damaged wheat, they invited death either by diarrhoea or cholera." Recently a new experiment has been begun there which if successful is likely to revolutionise our methods of grain storage. At the suggestion of Mr. N. C. Mehta, I.C.S. a large number of storage chambers made of reinforced concrete have been built at the cost of the Muzaffarnagar Grain Chamber Ltd. Each chamber has a capacity of 100 cubic feet and can hold 625 maunds of wheat. The great merit of these chambers is that they are rat and insect proof and they keep the grain absolutely dry. In the Central Provinces, in important wheat markets like Kareligunj, grain is stored in pits on which the Bank advances 80 per cent of the value stored. The bags of grain are brought to the mouth of pit and the grain is then unloaded, the bags having been counted and weighed before this. The pit is then closed up and plastered with mud and a number given by the financing Bank is affixed to it. The Bank also maintains a staff of its own to keep guard over these pits.

*Agriculture and Livestock in India, Vol. VIII, p. 267.

In these Khattis or pits, damage due to weevils is negligible but much grain is not only decomposed due to damp but the entire stock catches such a bad smell due to the decomposition of a portion of grain that "Khatti wheat always sells in the market at a discount of one anna per maund." During spells of heavy rain, there is the further risk of the sub-soil water level rising and flooding the Khatti from below. The damage caused in Khatti storage has been estimated at about 5 per cent per annum and the discount at which the Khatti grain sells in the market raises the loss of 6¼ per cent. Another disadvantage of the Khatti is that the emptying of a Khatti is a very laborious task as two men have to be employed to draw up the baskets and one man has to go inside the Khatti to fill the basket up.

This form of storage enables the middleman to obtain financial assistance from Jointstock Banks. When a Khatti is filled in an important market, a parcha or note giving the details of quantity and value is sent to the Bank which after the necessary scrutiny may advance upto 65 to 75 per cent of the face value of the Khatti and as a token of possession the Bank may place a stone on the Khatti with its name inscribed on it. The usual rate of interest varies from 6 to 8 per cent.

Thus under the system of storage in vogue at present, the small or even mediumsized grower has no facilities for holding up his produce and the middleman can alone do it but the cost of storage to him amounts to about 12 per cent per annum including the loss due to damage and the Bank interest which is rather high. If the margin between the maximum and the harvest prices is not large enough or if the commodity is liable to great short period fluctuation in price, storage will not prove remunerative till the cost of storage is lowered. Mr. Darling in his note on "Punjab marketing" has stated that according to the estimate of Mr. Roberts, Managing Director of the British Cotton Growers Association "with a harvest price of Rs. 4 per maund it would not pay to hold wheat over the monsoon unless price rose to Rs. 4-6-0 per maund. From a study of wholesale

price of cotton and wheat between 1924 and 1930 we find that only in two years out of seven would it have paid the dealers to have held it up." The following index number of wholesale prices of harvest and maximum prices of common rice in South Bihar and Linseed in North Bihar also support the contention that the margin is not always remunerative :—

	Common rice.		Linseed.	
	Harvest.	Maximum.	Harvest.	Maximum.
1920	104	122	116	116
1921	104	105	86	131
1922	80	84	86	104
1923	77	94	102	104
1924	93	96	86	102
1925	79	95	104	104
1926	107	112	103	88
1927	117	116	85	86
1928	101	103	86	88
1929	89	90	81	102

Taking the figures of rice in the Calcutta market we find that between 1930 and 1933 the middleman must have made good profit in 1931 when the margin was as high as 18 per cent while in the other three years it varied between 2 to 3 per cent. Storage in the case of commodities which have very rapid fluctuation in the price, for example cotton becomes almost a sort of gamble. The following table gives the percentage of the variation in the price of Berar cotton (oomcas) between 1923 and 1926.

Month.	1923.	1924.	1925.	1926.
Jan.	11.6	13.8	6.1	9.2
Feb.	11.3	13.2	8.0	0.0
Mar.	16.2	11.4	0.0	9.1
Apr.	11.4	6.3	4.1	15.4

May.	22.2	11.9	7.6	22.5
June.	7.2	5.0	17.2	10.2
July.	10.1	5.6	10.2	9.4
Aug.	7.0	3.8	13.1	15.1
Sep.	11.2	12.0	7.3	8.2
Oct.	5.4	7.1	16.2	0.0
Nov.	24.2	6.3	18.4	29.0
Dec.	19.4	11.2	1.8	22.1

These figures indicate not only the extent of the variations in the price level within the month but point to a periodicity in the fluctuations, as in certain months, e.g., March to May, i.e., when the cotton sowings are being carried on and during November and December when the cotton is being picked from the fields, the fluctuations are the greatest. There is no doubt that the prices in the foreign market to a considerable extent influence the fluctuation in summer but whith a well regulated system of storage much of this variation could have been avoided. Holding up by the grower has been discouraged by the C.P. and Berar Banking Enquiry Committee who "doubt very much the advisability of such action under existing conditions as far as the Cotton zone atleast is concerned." They cite an instance of an organised attempt which was made to bale and store cotton for better prices in the Manjrod tract of the Burhanpur Tahsil of Nimar but this venture proved a great failure and a large number of farmers suffered in consequence.

In commodities, the prices of which are influenced by world factors, it is mere speculation for the unorganised small farmer to attempt to hold up his produce until and unless he can by some means keep himself in touch with the movements in the world market. With the middleman the position is different. He is more wideawake and in addition to the support he gets from banks, he distributes widely his risks over a number of commodities and thus to some extent can withstand a sudden reverse. In the case of

wheat in 1928-29 the prospect of a failure of the crop pushed up prices in the northern portion of the Central Provinces and growers held up the produce in the expectation of better prices but in the meanwhile the heavy importation of cheap Australian wheat at Bombay depressed the market considerably and prices fell even below the normal price of previous yars. In north Bihar the same fate befell those tobacco growers who held up their produce in 1930 in the expectation of a sudden rise in prices caused in previous two years by the partial failure of the crop both in Bengal and Madras.

The middle man, on the other hand, can usefully promote the stability of prices by storing up the produce provided it is possible for him to lower the cost of storage by a reduction in the damage to the produce by an improvement in the system of storage and by a lowering of the Bank interest rate and an extension of the financial assistance which he ordinarily obtains now.

Some idea of the amount of storage capacity of our principal markets may be made from the figures collected by Shah and Davar in the Punjab:—

Ferozepore Cantonment	..	400,000	maunds.
Moga	..	3,95,000	„
Fazilka	..	500,000	„
Lyallpur	..	400,000	„
Chak Jhumra	..	250,000	„
Hassan Abdal	..	32,000	„

The problem of a safe method of storage becomes all the more important in the case of such perishable commodities as fruits and vegetables. Cold storage facilities for fruits have just been introduced in some of the principal city markets of India, while various experiments have been carried on to reduce the wastage in the storage of such vegetables of wide demand as potatoes. Bombay has an advantage over northern India in that she has two potato crops in the year so that the necessity of storage for more

than 2 or 3 months does not arise whereas in Northern India, potato has to be kept from 6 to 8 months. The indigenous method of storage in Bombay of keeping potatoes in sand causes a wastage of about 15 to 20 per cent and the cost is about Rs. 4-8-0 for every 1000 lbs. of potatoes, stored but he wastage is proportionately greater in Northern India, being about 50 per cent. The researches of Mr. N. D. Vyas have resulted in the reduction of wastage to 28 per cent by weight by keeping the potatoes on sand mixed with cinders or charcoal.*

The handling and storage of grain in elevators has revolutionised the marketing of wheat in the West and in North America and schemes for constructing a network of elevators in the Punjab have been put forward from time to time. It has been proposed that there should be concrete Elevators in suitable centres in the interior to which the growers will bring their wheat in bulk or in bags and there it would be automatically cleaned and weighed and put in bins. On payment of the Elevator charges the grower would be given the receipt for the grain placed in the bins and in case of his selling the wheat, the purchaser would be entitled to delivery on producing he receipt. In other cases, the grower would be able to raise loans or advances on the basis of these Elevator certificates. The terminal elevators should be located at large consuming centres or at the ports and they should be equipped with appliances for receiving grain from carts or railway wagons in bulk or bags and for discharging from the elevator back to the railway wagons for transport to ports. The success of the elevator system will depend to a large extent on Government support and railway co-operation. Acquisition of land at important centres, supervision over elevators and guarantee by Government of the Elevator reciepts, the provision of bulk transit wagons and siding facilities by the railway would to a large extent promote the development of this system. There is no doubt that much of the waste

*Cf. Storage of Potatoes by N. D. Vays (Agri. Journal of India, Vol, XXV, p. 408).

committed in the indigenous system of storage would be avoided in Elevator storage. The grower would not be handicapped for the lack of funds as the elevator receipts would make good security and as the grain will be transported in bins on the railways, it does not run the risk of damage due to weather conditions. It would be possible to promote the grading of the grain into a few recognised grades. The elevator would be able to regulate the marketing of grain by handling first of all wheat meant for export in summer, and to encourage storage during the monsoon months by lowering the elevator charges and later on push on marketing by raising the rates gradually. Success of this system demands that there must be a steady supply of grain to the elevators all the year round and the exports should be gradually growing. In the war period, the export rose to 1 million tons but between 1918 and 1926 fell to 327,000 tons and further to 197,000 tons in 1930-31 although the acreage gradually expanded owing to the extension of irrigational facilities. Then again the exporting houses are not in favour of this system as under the old system they are assured of cheap acommodation in the storage yards and of cheap labour for working the grain and the new system would entail more cost as they would have to maintain an inspection service for the grading and certifying of wheat. One experimental grain elevator was started at Lyallpur in 1913 and it was thrown open for commercial service in 1920. "It has found some use in grain storage and rendered service in cleaning grain and raising its value, but though a few small shipments already made from it have earned a premium in the British market, the disorganised state of the export trade in recent years has thus far prevented adequate demonstration of its capabilities".*

Another method of improving the condition of warehouses and licensing them by the Government is to make the warehouse reciepts freely negotiable. The U.S.A. enacted in 1916 the U.S. Warehouse Act with the object of encourag-

*India as as Producer and Exporter of wheat (Stanford University) P. 361.

ing the proper storage of agricultural produce, of introducing sound business practices and of making the warehouse reciepts acceptable to bankers as security for loans. Under this Act Public Warehouses which store agricultural produce can be licensed and bonded provided they have in charge men of good reputation, having some assets. The warehouseman must furnish an acceptable bond of an amount fixed by the Government, mainly depending on the size of the warehouse. The warehouse must have facilities for correct weighment. The warehouse has to pay an Inspection fee in addition to a license fee and in return the Government inspects the warehouse at least four times a year. On depositing his produce in the ware-house, the grower gets a receipt in which are mentioned the description of the commodity, its weight and grade and this receipt may be used as collateral security against loans issued by Banks.

This act as amended in 1923 and 1925 has extended its scope to a considerable extent and in addition to cotton, grain, tobacco and wool, such commodities as dry beans, peanuts, potatoes and dry fruits are also accepted. The storage of grain has increased from 2 million bushels in 1921 to 28 million bushels in 1925 and of cotton from 440,000 bales to 2½ million bales during the same period. "The Act is proving a boon to co-operative marketing associations, by promoting the inspection, grading and standardisation of their products. The warehouse under this Act also furnishes protection against loss and damage from weather and from rodents. It also furnishes insurance at the lowest commercial rates"* In Egypt, under the recent cotton marketing system the Government undertakes to gin cotton and sell the lint as well as to provide facilities for the storage of cotton against which advances upto a reasonable extent are also given.

In India, as we have seen, both the grower and the middlemen are handicapped in the work of storage by the

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*Boyle—Marketing of Agricultural Products, p. 141.

lack of funds. The grower can obtain loans from the money-lender only on very high rates of interest and in the case of some commodities like Jute and cotton, it is not possible for him to arrange for its safe custody in his own house. The Jointstock Banks, particularly in the Punjab, lend on the produce stocked by middlemen in godowns and in some places the landlord or the Bank itself has built warehouses to facilitate transactions. In every case the financial position of the merchant is carefully enquired into and his maximum credit limit is fixed. The produce is weighed and stored in the presence of the Bank staff is subject to periodical inspection. The rate of interest charged varied in the case of wheat from 7 to 7½ per cent and in the case of cotton, it is one per cent above the Bank rate subject to a minimum of 6 per cent. There is no doubt that this high rate of interest acts as a brake on the expansion of storage work sustained by Bank advances. Thus the idea of licensed warehouses is not at all novel in India. The grower is accustomed to take advances from the Aratdar and the Aratdar from the Bank and all that is wanted is proper regulation of the work with a view to purge the system of all-its abuses, ensure a fair deal to all parties and above all, to break up the monopoly of the Banks in the business by making the warehouse receipts freely negotiable. In some commodities like Jute, storage in this line will do much good both to the producer as well as to the buyers. The Bengal Jute Enquiry Committee pointed out that "fluctuation in the price of jute even in the course of the same season, is so remarkable and the potentiality of a rise in price, through restriction of saleable supply of the fibre by retaining a part thereof in warehouses, is so likely that jute may be regarded as just the sort of commidity that will bear the cost involved." These warehouses may be started by co-operative organisations or by private enterprise as well. The funds required for the construction of the warehouses may be advanced by the Government, the landlord or the Co-operative societies. In the management the assistance of the Aratdars or of those qualified graders who are now working in the agency offices of leading jute firms,

may be obtained. Much of the success of these warehouses will depend on reducing the overhead charges to as low a level as possible. In the case of wheat, till standardisation of the grade is perfect, the only possible alternative will be to pool the produce and offer to the grower the average price of the season instead of the highest. This may be a serious obstacle in the early stages but patient propaganda and the assurance of a fair price will in the end prove to be ample encouragement to the producers. With an improvement in the grading of the commodity the prices are likely to rise and the grower would derive more profits therefrom and in addition to this, get the assurance of correct weighment and a reduction in the handling and other incidental market charges. The warehouse should avoid the common practice now prevalent of the Aratdar's trading on his own account besides being the commision agent for others. The warehousemen should not also take part in the grading of the commodity stored by him and in course of time there may develop a class of licensed measurers and graders. The creation of a new type of security in the warehouse warrants would greatly facilitate the use of Trade Bills although this procedure may at times prove somewhat inconvenient as in the ordinary course of business the bill would be discounted several times and if the original holder desires to sell his goods before the liquidation of the Bill itself it may be difficult for him to secure the warrant itself or he may have to meet the bill himself before maturity before he can sell the goods. Whatever be the actual limitations, there is no doubt that the borrowing capacity of the producer or merchant would be considerably increased by the use of the warehouse warrant as a security for loans, overdrafts or cash credits.

It has been suggested that the railways should not only give adequate assistance to the warehouses but own them in as many cases as possible. The proposal certainly looks attractive on paper but there are certain practical difficulties. From the estimate supplied by the Railway Board to the Central Banking Enquiry Committee we find that the

storage charge per maund per day will not be high, being 0.3 pie for Jute at Dinajpur on the E.B.Ry., 0.2 pie for grain at Okara on the N.W.Ry. and 0.2 for cotton at Akola on the G.I.P. Railway, on the supposition that the trade at these stations is fairly heavy and well distributed throughout the year. In the case of smaller centres the overhead charge will be proportionally very high. The business quarters in many towns are not always close to the station and the approaches to the station may not be such as to develop market centres there. Thus the management of warehouses by railways is not likely to prove a success everywhere. On the other hand the railways may be expected to give facilities to private or Co-operative warehouses by giving leases of railway land or giving monetary assistance in the construction of warehouses in the vicinity of the railway goods sheds on suitable terms and also give them the "Assisted Siding" facilities and assist them in every possible way in the delivery and despatch of their consignments.

CHAPTER IX.

ADULTERATION AND GRADING.

The agricultural produce of India has earned a bad reputation in the foreign market owing to the presence of impurities in it and its admixture, although as in the case of wheat, it must be said that the ill repute was considerably exaggerated. In the early stages of the wheat export trade, a large proportion of impurities was noticed for which a "refraction" allowance at 5 per cent was fixed. Later on in 1888 when the monthly shipments were subjected to a more intensive analysis, it led to the somewhat surprising discovery that the refraction of these samples was less than the stipulation of the contracts and that the adulteration of Indian wheat perhaps had not been carried far enough."

There is no doubt that many of our commodities, e.g., wheat, rice, cotton, groundnuts, etc. at some stage or other is damped or mixed up with other grains or with inferior varieties of the same commodity. It is a striking fact that the cases of damping and admixture become very common when the prices show a tendency to rise due to a short crop, so that the grower tries to ensure a good value for his consignment. It has been found that although here and there, cases to the contrary may be noticed, the grower is not responsible on a large scale for the deliberate admixture or damping of the commodity and wherever he does, he is encouraged to do so by market practices. In the case of cotton, the admixture is partly due to the cultivator growing and selling a mixture of different varieties of cotton by the seed getting mixed in the ginneries and partly because the cotton of the locality is a natural mixture. In 1909 an inferior variety of cotton called Pulichai was introduced into the Tinnevelly District of Madras and as its yield was about the same as that of the superior Karungami cotton and it yielded a higher ginning percentage it came to be

mixed with it. In course of six years, the Pulichai acreage expanded so fast as to threaten the reputation of the Tinnevelly itself and drastic action became necessary. The Department of Agriculture sought the co-operation of the trade in 1917 and the buyers refused to buy any Pulichai cotton. Leaflets were widely distributed before the sowing season pointing out the danger to Tinnevelly cotton and vigorous village to village propaganda was carried on by the Agricultural and Revenue officers. As a result of all these efforts the acreage fell only by 30 per cent, then the buying and ginning firms entered into a formal legal agreement allowing the periodical inspection of their yards and accounts by a selected officer of the Agriculture Department who was empowered to impose penalities if it was found that the contracting parties had paid for any Pulichai cotton.

That the defective organisation of our markets to some extent promotes adulteration is illustrated by the following extract from the evidence given by Chaudhuri Mukhtar Singh before the Royal Commission on Agriculture.—"As far as adulteration goes, the farmer is not at all responsible for it. I have seen the people in the market before they export commodities to other places putting in sand, earth, and every other article that they can easily use for increasing the weight of the produce. They do it because even an article without sand, has to pay Karda charges and even where these charges are not levied, articles containing sand, are sold for a much higher value than they would have fetched if they had not contained any such adulterants." In cotton marketing we have seen that the merchant usually tries to increase the rate of deductions on account of the difference in quality when half the produce of the cart has been weighed. When it was found that the wheat exported from India contained impurities at a much lower proportion than the 5 per cent laid down by the London Trade Association and the demand for its reduction was opposed vehemently, "it was said that the presence of dirt in Indian wheat was encouraged by certain large Millers who possessed elaborate cleaning machinery and who thereby gained the

advantage over their competitors in that they were able to handle wheat which the latter could not touch and thus secured the sale of Indian wheat to themselves at unduly depreciated prices".* The damping of cotton is usually done by the middlemen. In the case of sales in the village, it is defended as necessary as "the Kapas comes in so very hot that if anyone puts one's hands into it, they would be blistered." The grower picks early in the morning when the plant is soaked with dew and when he brings it to the merchant, the latter waters the ground, then puts the cotton on the wet ground and covers it with a thick piece of gunny bag so as to allow the cotton to absorb the moisture gradually. In many places, damping is encouraged not only with a view to cause little harm to the pressing machine, but due to a mistaken notion that moderate damping makes it look glossy and increases the length of the staple. It is not realised that the cotton loses its whiteness and acquires a stain and above all the seed loses its power of germination. In the N. W. Province damping has to be done owing to the peculiar method of transport in use there. Unginned cotton is carried to markets on the back of buffaloes packed in string bags and it is necessary to damp the cotton so that more can be pressed into the bags. The greater offendors are however the Ginning Factories. It was admitted by the Commission Agents of Okara (Punjab) before the Banking Enquiry Committee that "a good portion of the short-staple cotton is mixed with long-staple American cotton but they asserted that the exporter insisted upon this being done and any factory refusing to do it would be ruined."

The damping of Ginned cotton is so common that Sir B. Dadabhoy, the leading cotton merchant of Nagpur remarked before a Government Committee—"I do not see how you can stop it; it is the business of the trade." Various methods of watering are practised, in different areas. Sometimes the cotton is not directly watered, but old gunny bags are placed over it and water poured on bags.

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*India as a Producer & Exporter of Wheat (Stanford University, p. 384).

Hosepipes are sometimes used to water the cotton directly. "The watering is carried on largely at night and I was told by another press manager that when there was a normal water supply fountains rose everywhere at Amaraoti after sunset." Another method is to take recourse to "false packing" by putting portions of one wet bale into the middle of a dry bale at the time of packing so that the fraud cannot be detected till the bale is opened in the Spinning Mill.

Messrs. Kilachand Devchand & Co., Volkart Brothers and Ralli Brothers in a joint letter to the Bombay Millowners' Association in March 1935 pointed out that the practice of watering raw cotton at the time of pressing was increasing every day." Indian cotton has ceased to be an investment and watering has become one of the causes of depreciating its price. The little profit expected to be gained in weight vanishes if the cotton is not soon disposed of after its arrival in the selling market and in addition its colour and class are spoiled and this affects its selling price. Due to this deterioration, its reputation is spoiled in the world market. If you look to the working of the season 1927-28 you will realise that the trade suffered to the extent of one crore of rupees owing to this malpractice of watering when ready Oomra cotton was sold at Rs. 45 per candy below the contract rate."*

The practice of damping ground nuts in the Madras Presidency is very common due to the belief that it makes decortication easy. Heaps of Groundnuts are wetted in the factories by pouring buckets of water. Even if the damp seed does not break in the process of decortication, it retains traces of damping and develops certain fatty acids, thus lowering the value considerably.

It was noticed that during 1918 and 1922 in some areas, e.g., Hubli, cotton in large quantities used to be imported form Bokhara because

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*Report of the Bombay Millowners' Association 1934 p. 224

it was similar in appearance to the local cotton and it was mixed up and sold as real "Kumpta". Short-stapled Khandesh cotton used to imported for admixture with Broach cotton. The Cotton Transport Act empowers the Government to combat this evil by notifying any tract as a protected area and prohibiting the import, save under license, of raw cotton, ginned cotton, colloseed into that area by rail, road, river or sea. This has prevented the grosser forms of abuse by restricting the supply of inferior varieties. This Act has now been extended to the important cotton areas of the Bombay and Madras Presidencies, Central Provinces and some Indian States like Baroda, Indore, Hyderabad and Sangli. Its extension to the Punjab, where in the same area two distinct varieties like the indigenous short-stapled and the long-stapled American are grown, is beset with difficulties.

Although the International Federation of Master Cotton Spinners' Association drew the attention of the Government as early as in May 1912 to the evils of the damping of cotton by the ginning factories and pressed for legislative action the first move in this direction was made with the passing of the Cotton Transport Act of 1923 and the Cotton Ginning and Pressing Factories Act of 1925. The Indian Cotton Committee had recommended the licensing of gins and presses but the Indian Central Cotton Committee was not in favour of an All-India system of licensing but would leave it to the Provinces. They pressed that the licensing clause should be included in the Cotton Ginning and Pressing Factories Act and the Provincial Governments should be authorised to enforce it. This problem is becoming more serious day by day and the demand for licensing in all the Provinces is becoming more and more urgent. Protection has become all the more necessary with the introduction of the new medium cotton Verum in the Central Provinces and the development of a big long staple area in Sukkur (Sind).

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*Pearse—Indian Cotton, p. 68.

The following statement will indicate the extent of the mixture of the two varieties in the same plots.

Percentage of Deshi Cotton in American Cotton Fields in 1925.

Containing 5 per cent of Deshi—68.8 per cent of total acerage.

6—10 per cent	.. 13.6
11—15 per cent	.. 7.5
16—25 per cent	.. 5.1
26—35 per cent	.. 2.6
36—50 per cent	.. 2.4

With a view to discourage this admixture the Indian Central Cotton Committee has supplied specimen bales of pure cotton grown in the Punjab to be kept for inspection and comparission both by buyers and sellers at the cotton exchanges maintained by the Liverpool, Manchester and East Indian Cotton Associations. Besides this the Cotton Ginning and Pressing Factories Act of 1923, which provides for marking of all bales of cotton ginned and pressed with a pressmark and a serial number so as to enable the Government to trace them to the factory of origin, is being vigorously enforced to check these mal-practices. There is no doubt that if these two acts are systematically carried into force, the abuse would be combated and drastic legislation of the type passed in Egypt in 1936 would not be required. Under this law in Egypt, it is penal to mix different varieties and in case of detection Government would seize it and get it ginned and sold, deduct all costs from the sale price out of the balance of which only 75 per cent will be paid to the owner. Better marketing organisation in India also will no doubt contribute largely to the prevention of this abuse. The lead given by the Bombay Government has been taken up by other provinces and States. The Hyderabad Cotton Cultivation and Transport Act of 1929 has prescribed restrictions regarding the cultivation and transport of cotton as well as its import with a view "to maintain the quality and reputation of cotton grown in certain areas in

H. E. H. the Nizam's Dominions. "The Madras Cotton Control Act of 1932 is even more drastic. It was enacted mainly to combat the Pulichai cotton menace and it prohibits the cultivation and possession of certain kinds of cotton, the mixing of such cotton with other kind of cotton and the trade in such kind of cotton." Officers have been empowered to enter upon any land in a notified area in which he knows or suspects that any proscribed cotton is being cultivated and may uproot or cause to be uprooted such cotton or may enter upon any land or building where such proscribed cotton is being mixed."

There is very little grading in the marketing of agricultural produce in India. The ryot does not grade his goods, not because he does not know the benefit derived from grading but because he is not paid sufficiently for the trouble involved. There are no markets in which a good grade is in demand. The producer of a graded article is always at a loss when he sends it to the market, hence naturally grading is avoided. When the marketing system is well organised it would be possible to ensure the grower proper prices for the differant grades of produce and grading would develop. Grading secures to the grower various advantages and it enables him to hold back the inferior class of goods for local sale and despatch only the higher grades exactly to those markets where they are required and thus make a considerable reduction in the cost of distribution. Further by proper grading considerable economy in space may be made at the time of storage. Besides this, it brings about a lowering in the storage charges owing to the definiteness of the knowledge which the warehouseman possesses about the article stored with him. In the actual work of marketing, the necessity for personal inspection of each consignment, which accounts for the low prices tobacco exporters of Guntur get in the London market is to a large extent avoided and the unseemly wrangles and arbitrations caused by claims for allowances due to variations from the samples of exported goods become a thing of the past.

In he marketing of rice there is a rough and ready gradation into fine, medium and coarse all though there is no uniformity in specimens of these three grades from different places. In wheat, before the War, five distinct grades were to be found, .g., Choice White Delhi, Choice White Karachi, Red Karachi, Choice White Bombay and No. 2 Club Calcutta but the three important postwar grades are the choice white Karachi, Choice White Delhi and Red Karachi. These standards are actually based on the view of the grain traders of England expressed through the London Corn Trade Association. The Calcutta exports are graded according to the proportion of Buxar wheat they contain as the Bombay wheat is graded on the basis of the Pissi wheat of the Nerbudda Vally. Choice white Delhi wheat contains a high percentage of well-filled white grains of the Muzaffarnagar variety, while the Choice White Karachi contains about 80 per cent of white grains and 20 per cent red.

In Malabar in the marketing of cocoanuts grading is done on the basis of the size of the nuts.* A standard bag such as is used for the husked nuts will hold from 110 to 400 nuts according to size. Each of the grades of nuts is known by the number of nuts per bag."* Copra is marketed in five grades—(1) Edible white, which in its turn is subdivided on the basis of the diameter of the cut kernel into POO. Mungi, Lavingi, Special, Elachi and Dala. (2) Vittumenioe office pass which gets the highest price among milling grades. (3) Thiruraslii or selection from the bad varieties. (4) Rashi (bad) and (5) Kazhippu or rejected.

In the marketing of fruits and vegetables in India a rough classification of the article is made before it is packed, but the object of this is not "to pack the fruit uniformly but to mix the different qualities in individual containers". It is usual to remove fruits which appear to be unfit for the market owing to their size, damage or malformation and then to pack the container with the fruits of inferior quality

*Report of Cocoanut Enquiry in India—J. S. Patel, p. 26.

at the bottom, medium quality in the middle and a few layers of the best variety at the top. In this case grading leads to what is known as "topping".

Different regions in India have different grades in cotton, e.g., in the U.P. the well-known grades are Deshi including Bengals, and the longer stapled Deccani, the sub-grades bearing numbers from 5/2 to 7. In Central Provinces among the commercial grades are the Gaorani, Roseum and Zoria with sub-grades of superfine, fine, fully good and good. Principal varieties of Indian cotton may be classified from the commercial point of view in to (1) Broach or Surtee Broach, white and silky, grown in Broach or Surat, (2) Kumpta and Dharwar, yellowish in colour, grown in Southern part of the Bombay Presidency, (3) Westerns, white and silky grown in North Bombay, Hyderabad State and Madras Presidency, (4) Oomras, longstapled, grown over a wide tract in Khandesh, Berar, Central provinces, (6) Bengals, white with yellow tinge grown in the U.P., Assam and Central India. It is a short stapled variety, (7) Cocanada, strong, white, grown in Madras, (8) Tinnevelly American grown in Madras also having a very long staple while the pure Tinnevelly is very white in colour, (9) Lyallpur American, grown in the Canal Colonies has a very white colour. In the case of many of these grades the area of origin plays often an important part in regulating the price and the demand irrespective of the quality of the articles.

Of Jute it has been well-said that "the present form and methods of grading and marketing are in a hopeless muddle. The grower does not know these and the grading is done by the buyer and exporting agencies who have branches in the outlying stations. The grading is neither uniform nor scientific".* The actual grading is performed by the sorters or Jachnadars who are employed on a fixed remuneration and as they have no scientific training they carry on their work on a rough and ready knowledge of the fibre. The principles, if any, on which the grading is based, are

*Cf. Evidence before Bengal Jute Committee, Vol. II, p. 24.

carefully kept as a trade secret and the cultivator derives little benefit from the grading as he very often is paid at a flat rate. "A cultivator who produces a special or extra special may find his produce priced as rejections or no. 6 simply because his jute is probably a bit muddy or lustre less through some defect or fault in retting though the fibre would be really of a higher grade."

The number of grades varies from locality to locality. In some there may be as many as 9 grades, e.g. Extra special, special, no. 1 to 6, Domar 1-4; Serajganj no. 1—5 etc. The Jute standards vary according to whether the raw jute is intended for export or for manufacture in the mills in India. The well established standards of quality for exported Jute are 'Firsts', 'Lighting', &Hearts', 'Daisee' and 'Tossa'. These standards rarely change and the sale is made subject to a guarantee of average quality. Loose Jute standards are to a large extent determined by the requirements of the Calcutta mills, hence they are not so unvariable or well defined as the export standards. With a reduction in production in mills, the demand for better grades falls off and if the supply of the same does not simultaneously decline the standards are likely to be disturbed as the grower being anxious to sell off his jute very often delivers his better quality of Jute for lower grades. In some cases the Mills to take advantage of this competition withold the purchase of a particular grade thus forcing the seller to offer the same grade of Jute at lower garde prices. As a result of these variations a grade known as L.R., which was inferior even to rejections, became for a time the top grade in the loose jute market. In 1925-26 in addition to the usual grades, e.g., no. 1, no. 2; no. 3; no. 4 and T.R.; a lower grade called B. T. R. or Bad Terrible Rejection came into operation as a result of which the standards had to be revised in the next season. As a result of the persistent agitation carried on by the Bengal Jute Bales Association against this frequent change in the standards, the Indian Jute Mills Association in June 1929 issued a circular "according to which the marks for all future seasons, whatever the quality

of the season, were to be 1's, 2's, 3's and 4's and Rejections were to be the lowest mark." But this Circular was not followed and in 1929 a new grade called "Low Rejections" was introduced followed by a lower one called "'X.L.R." in 1930 and major portion of the business was carried on under these two grades. The proposal of the Bengal Jute Balers Association to substitute sale on the Warp and Weft Guarantee in place of sale on "the standard of the mark" also met with no encouragement in the Mills, thus the position remains as unsatisfactory as ever.

The demand for government intervention in the fixation of standards was first made by the Indian Chambers of Commerce in 1928 and it has been kept up since then by different sections of the trade. The Central Banking Enquiry Committee were impressed by the imperative necessity for an early solution of this problem and recommended that "the local Government concerned should take prompt steps for the fixation of proper standards of Jute." The Bengal National Chamber of Commerce representing an important section of the mercantile community also lent great support to this demand for standardisation by an Act of the Legislature as "these changes give the suppliers almost a surprise and they invariably entail a loss on them by requiring them to deliver a better quality than had been originally contracted for. The loss incidental to such arbitrary changes has its natural repurcussions on the whole jute trade and it is sought to be shifted backward over to the minor intermediate vendors till at last it reaches the cultivators."

Legislation for the fixation of standards was undertaken first in the U. S. A. and a brief resume of the history of U. S. Cotton standards Act will indicate the scope and limitations of legislation of this type. The attention of the cotton exchanges of the U.S.A. was first drawn in 1874 to the need for the adoption of a standard for cotton and after long discussions, a standard classification was adopted which, however, was not followed by any cotton exchange except New York. When the mercantile community failed

to achieve this unanimity, in 1908 the Government stepped in and instructed the Department of Agriculture "to establish an official standard for the nine grades of white American cotton". The standards laid down by the Department were purely of a permissive nature and the adoption of it was voluntary. It was never accepted by the trade and it served only to complicate the situation by adding one more to the commercial standards which were current then. In 1914 as a result of the joint efforts of the Liverpool and American Cotton Exchanges an international standard was retained and the U. S. A. Government was pressed to adopt at a time when that Government itself had made it obligatory under the Cotton Futures Act of 1914 on the Cotton Futures Exchanges in he United States "to apply the official cotton standards in all transactions on and after 18 February 1915." The Liverpool proposals could not, therefore, be entertained and with a view to establish better understanding and persuade the European Exchanges to accept the U.S.A. standard, the Government sent a delegation to Europe. The net result of these conferences was to convince the European Exchanges, particularly Liverpool, that the U.S.A. standard was broad enough to replace the separate Liverpool standards for Upland, Gulf, and Texas Cotton. As a result of the study of European markets, the official standard was revised in 1916 but no attempt was made to secure its general adoption in the U. S. A. In view of the changed methods of cotton production necessitated by the Boll—Weevil pest, a further revision of the standards became necessary and in 1923 the Cotton Standards Act became law. It compels "every merchant, shipper, buyer, trader in the U. S. in every transaction, quotations for cotton for shipment, publication of prices, and in classification of all cotton in inter-state and foreign commerce to use the official cotton standards of the U.S. only, provided the quality of the cotton involved is of, or within the range of, the official cotton standards of the United States." As the law was of a drastic nature it invalidated at once all bills of lading, warehouse certificates, shipping certificates etc. which did not confirm to it and the repurcussions of these

on the foreign trade in cotton were very far reaching and immediate. With a view to ease the situation and remove the hardships, the American Agricultural Commissioner visited all the important cotton markets of Europe and convened an International Cotton Conference at Washington in June 1923. As a result of this a working compromise was arrived at by which the European Exchanges agreed to adopt the U.S. Official Standard with necessary modifications and the U.S. Government recognised the authority of these Exchanges in arbitration proceedings. Thus "inspite of comprehensive and rigorous legislation it took no less than ten years for the U.S. Department of Agriculture to get the standards for American Cotton universally adopted and then only after making considerable concessions to foreign interests." Therefore legislation is not the sole panacea of our troubles connected with the standardisation of loose Jute in Bengal. Where the supply is greater than the demand, the law by basing the standards on minima can hardly prevent the seller from offering better Jute as lower grades. On the other hand, legislation is certainly necessary to prevent any alteration in the names of standards which have been established so as to introduce more stability and uniformity and the Jute Mills, whose interests are no doubt bound up with the promotion of better trade, could be persuaded to accept the standard in course of time. It may be mentioned in this connection that the grading was unknown till recent years in the marketing of cotton in Brazil. The State by a Decree in July 1933 gave official recognition to some widely accepted grades of cotton and directed that all sales should be carried on, on the basis of the certificates granted by the grading officer appointed by the Department of Textile Plants or by the local grading Committee. This reform has put an effective check on admixture and has encouraged the farmers to improve the quality of their cotton. In India a great advance has been made towards the solution of the problem of standard so far as the cotton industry is concerned due to the efforts of the Central Cotton Committee. In 1934 the Standards Sub-Committee of this Committee were engaged in preparing standards for

Bengal, Sind, Punjab-American and Sind-American cotton after consultation with the representatives of the East India Cotton Association and Karachi Cotton Association. The East India Cotton Committee preserve one set of the passed standards in hermetically sealed boxes every year for referance in cases of dispute.

In England the Agricultural Produce (Grading and Marketing) Act of 1931 enables the Minister of Agriculture and Fisheries to make regulations prescribing grade designations to indicate the quality of any articles of agricultural produce and to define the quality indicated by every grade designation. The Agricultural Marketing Act of 1931 also enacts that any Board may be empowered to determine the kind, variety or grade of the regulated product which may be sold. In both these cases, the grades are determined after frequent consultations with the producers so as to make them acceptable by the market. The element of compulsion is absent." Once regulations have been passed the adoption of grade designations is entirely a voluntary matter. They can be used without special authority and the liability involved in their use is a civil one only. If, however, an article soldunder a grade designation does not accord with the statutory designation as contained in the regulations the purchaser can claim damages for breach of warranty. In no case, however, is the seller liable to criminal proceedings".* Before any scheme of grading is adopted, a detailed enquiry into the existing methods of marketing and grading of the produce is held with a view to the drawing up of tentative grade designations affecting the size and quality of the produce. These proposals are demonstrated at Agricultural Shows and the views of farmers are ascertained after which the proposed National Mark Scheme is submitted to the National Farmers' Union or to a Conference of producers and processors. The next stage is to put up this before a Trade Advisory Committee appointed by the

*Memorandum on the Standardisation of Agricultural Produce in the United Kingdom, Ministry of Agriculture D37426—1—200 page 1.

Ministry and when it is approved and sanctioned by the Ministry it is published in the Government Gazette and the statutory rules are printed in the form of leaflets. Inspectors visit packing houses and inspect packed produce at the factory as well as in the distribution centres with a view to ascertain whether the grade designations and the appropriate requirements regarding quality have been complied with and in cases where the product does not come up to the standard the grade designation mark is cancelled. In India, however, a definite move has been made in this direction. In February 1937 the Act for the Grading and Marking of Agricultural Produce received legislative aproval. It provides for the recovery of expenses of grading and marking from the interests concerned. In course of the discussion it was pointed out that confiscation would not be made a penalty but "the measure would operate only to the extent that was necessary for the purpose of evidence that the goods against which action had been taken were in fact marked in such a way as to infringe the provisions of the Bill".

CHAPTER X.

TRANSPORTATION

In course of his memorable minute to the Court of Directors, Lord Dalhousie wrote in 1853 thus—"Great tracts are teeming with produce they cannot dispose of. Others are scantily bearing what they would carry in abundance if only it could be conveyed where it is needed. Every increase of facilities for trade has been attended with an increased demand for articles of European produce in the most distant markets of India. Ships from every part of the world crowd our ports in search of produce which we have, or could produce in the interior, but which at present we cannot profitably fetch to them." That the vision of this great administrator has proved true is evidenced by the vast network of railways and roads which we possess to-day. India had in 1933-34 a total mileage of 46,910 open railway lines with a capital investment of Rs. 8,84,00,00,000 and more expansion is urgently required to open up the interior of the country more fully. In contrast to this, it was said of India of a century back that "there never was a country with people so intelligent and rich in which roads were so few and travel so difficult". The conditions of transport prevailing then were such that the cotton of Nagpur and Amraoti was brought a distance of 500 miles for sale to Mirzapore on the back of oxen carrying 160 lb.s each, the period taken in the journey varying from 10 to 11 weeks. The cost per ton amounted to £18 and "if it rained in the journey the carrier often perished under the burden of the saturated cotton in the soft and unmetalled track." The direct results of the expansion of roads and railways in the second half of the 19th Century are reflected in the following figures illustrating the great development of foreign trade in India. Transportation creates place utilities and is as productive as the services rendered by the cultivator or the storage work performed by the warehousemen. With

the gradual improvement of the means of communication the area of the market both in the country and out of it has expanded considerably as reflected by the uniformity in the level of prices even in distant markets as contrasted with the fact that 100 years ago during a famine when coarse grain sold at Agra at 5½ seers per rupee, the prevailing rate in Goondwara was 40 seers. In the marketing of fruits both dry and fresh and vegetables big urban consuming centres like Bombay and Calcutta derive their supplies from distant provinces of India and Afghanistan. Bombay gets her supplies of fruits from all over the Presidency while mangoes are supplied to Calcutta from Lucknow, Bihar and the Godavari Delta. Sylhet oranges have as wide a market in Cawnpore and Delhi, as Kashmir fruits have in Bengal or Simla potatoes and Bihar mangoes in Burma. The gradual expansion of the market is indicated by the fact that in 1926 the average number of miles one ton of goods to be carried was 237 and this rose to 244.5 miles in 1933.

Transportation involves usually three processes—(a) a short haul on village roads from the village to the railway station or the Mandi (b) a long haul on the railway or steamer from that place to the consuming or exporting centres (c) a short haul at the terminal point to the port or factory or the distributing centres. Then in cases of exported commodities, a longer haul is required in steamers to the country of destination.

Although the road system in India is improving rapidly, the basic deficiency even now lies in communications in the villages or connecting the villages with the district roads. In Berar, the village roads are about 33 feet in width and are full of ruts making it difficult for the cotton carts to proceed to the markets as in many areas there is practically no supervision over these village roads or tracks. Occupiers of adjoining fields encroach upon or cut them with their irrigation channels with the result that they are frequently below the level of the neighbouring fields and serve as water courses during the rains. In Khandesh, "the black cotton soil at the end of the rains is a mass of

cattle footprints, nearly one foot deep and in a very few weeks it gets as hard as iron and nothing can be done with it. Diwan Bahadur K. R. Godbole, President of the Poona District Local Board pointed out to the Indian Roads Development Committee that 50 per cent. of the villages of that district had no other roads except cart tracks. "Some of the villages have got rocky tracks over which country carts have to ply and they break their axles. In some cases the cart tracks go through deep ruts where you find that if there is a cart coming from the other side, the incoming cart has to be lifted up before a passage could be made for the other cart. In some cases the ruts are 10 feet deep and being locked like that for six or seven hours, very often the load in one cart has to be moved and the body of the cart lifted and a way made for the other cart." Some idea of the road conditions in the Punjab may be formed from the following description given by Mr. W. R. Wilson of Dera Ghazi Khan,—"wheeled traffic can ply in winter from 5 miles north of the headquarters to the southern limit of the District but in summer when the canals are running and hill torrent spates are broad communications are badly interrupted. I have had an involuntary bath in over 2 feet of running water on the main road as early as the beginning of May and if the canal embankments breach, as they sometimes do, the eastern part of the District becomes a swamp." In the United Provinces the heavy traffic in summer when the winter harvest is marketed causes ruts in the soft alluvial soil of the village tracks which become muddy and waterlogged after the monsoon becoming impassable at places and imposing a great strain on the draught-cattle on these roads. In some areas like the Arambagh Subdivision of Hooghly district of Bengal there is a great difference between the local market price and that at the nearest railway station, the ryots store up the whole of their produce in granaries to sell the same at whatever prices are offered during the rains when the floods come in and boats of merchants penetrate into the interior. In the case of perishables like potatoes or Gur the ryots lose 8 annas to 12 annas per maund as it is not possible to hold

up these commodities for any length of time. In the Hoshangabad District of the Central Provinces, there is a fairly extensive network of fair weather roads but during the monsoon the conditions are changed. "The heavy alluvial soil becomes a morass, impassable to wheeled vehicles and for four months communications with the market are practically suspended." As a result of this the ryots are compelled to sell up their grain in April and May at whatever price may be ruling. In the Karnatak tract, very often there are heavy showers just after the last picking of the crop is over and as a result of this, the traffic is held up for a fortnight or more, and the grower who wants to dispose of his produce during this period is very much handicapped and he is not in position to take advantage of better prices.

The upkeep of these roads is usually the function of the village Panchayats although in some provinces the District Boards also look after a certain percentage of the more important village roads. These Panchayats are empowered to raise funds by local cesses, which is not usually done and in many cases the proceeds of these cesses are either insufficient for meeting local requirments or are not wisely spent. In the Central Provinces the old Baluta system by which the Mahars were instructed with the work of repairs, has been abolished. There is no doubt that till our village Panchayets realise their own responsibilities not only some driving force from above but also financial assistance would be required. The experiment initiated by the Punjab Board of Communications in 1928 of giving liberal grants to District Boards which took up an intensive programme of the improvement of these village roads has produced good results.

The roads connecting important villages or smaller markets with bigger markets are much better although in some regions owing to the paucity of bridges the roads can not be used during the monsoon months. In some of the older canal colonies of the Punjab roads were made last hence in many areas marketing is hampered by lack of means of communications but in later colonies the roads

have preceeded agricultural expansion with the result that the market area has widened and transport has considerably developed. In transport of goods the motor truck has not yet proved a formidable rival of the railway but with an improvement in the road system the competition will no doubt grow steadily. Motor transport is effective where the road distance between two points is shorter than the railway route e.g., between Conjeeveram and Madras, the distance by the road is 34 miles and by railway 57, and between Kodaikanal Road and Virudhnagar the difference is about 10 miles. Motor transport is largely being used in the transport not only of fruits and vegetables, but also of grain and oilseeds. It is not confined to traffic over short distances as large quantities of fruits are carried from Rawalpindi to Delhi, a distance of 477 miles, from Landikotal to Peshawar (125 miles), Amritsar to Lyallpur (123 miles) while in Bengal country tobacco and vegetables are transported from Katwa to Calcutta (107 miles). There is a large motor traffic carrying grain between Asangaon and Bombay, Ghoti and Nasik, and of groundnut between Kapadvang and Nadiad. Motor transport ensures quick and door to door service and saves the cost of transport to and from the railway station. The rough handling to which very often vegetables are subjected in railways is avoided in motor transport and this accounts for the increasing use of motor vehicles in the transport of these commodities.

Road conditions in India differ widely in the different provinces. In some parts the construction of roads to serve all purpses is comparatively inexpensive, whereas in others like Bengal and Assam where the country becomes impassable during the rains, road making is difficult as the cost of bridges is prohibitive. In Orissa due to ever recurring floods, embankments have to be constructed and the roads are usually made on these embankments which are liable to be washed away during floods. In the Punjab in many parts of the Gangetic plain roadmaking is rather expensive due to the lack of suitable road metal, while in Sind, sand is a great obstruction to road making and of all the pro-

vinces of India, Sind has the smallest percentage of metalled roads. The total mileage of roads in India is 201,000 miles of which 31 percent is metalled and 69 percent unmetalled. Compared to the United States of America, per 100,000 population India has 23 miles of surfaced roads as against 383 miles of U.S.A. and the corresponding figures for unsurfaced roads are 55 and 2167 miles. With the same territory as New Zealand and 10 times her population the C. P. has one seventh of her surfaced road mileage. The main deficiencies of Indian roads are that in many important centres there are unbridged river crossings which during winter can be crossed on pontoons involving great delay. The majority of the roads are 9 feet wide, which, though quite suitable for bullock carts, are not so for motor traffic which require a minimum width of 12 feet. The system of financing the construction of a large proportion of roads through District Boards has resulted in great gaps in the road system making inter district movement almost impossible in many areas. Many of these roads are not properly drained and have a weak surface. It is extremely difficult to maintain waterbound roads where the rainfall exceeds 50 inches per year. This wide diversity of natural conditions as well as methods of roads finance account for the great inequalities in the road mileage in the different Provinces as the following tables will show.

ALL KINDS OF ROADS

	Per 100 sq. miles of cultivated area	Per 100,000 population
Madras	36.0	67.0
Bombay Presidency	33.7	105.1
Sind	86.0	399.8
Bengal	43.7	41.6
U. P.	66.1	78.0
Punjab	46.0	110.1

ALL KINDS OF ROADS

Per 100 sq. miles of cultivated area.			Per 100,00 population
Burma ..	36.3	..	.. 91.6
Bihar & Orrisa	61.4	..	.. 85.8
Central Provinces	19.5	..	.. 60.7
Assam ..	62.3	..	.. 122.0

That the condition of the roads has improved is shown by the gradual increase in the percentage of metalled roads between 1917 and 1927. The increase was 25 per cent. in Bombay, 31 in Bengal, 9.9 in the U. P., 15 in Punjab, 30 in Burma, 44 in Bihar & Orissa and 36 in C. P. The actual percentage of metalled roads to the total mileage in 1927 was—;

Madras	.. 87.0
Bombay Presidency ..	.. 47.4
Sind	.. 0.8
Bengal	.. 17.5
U. P.	.. 21.8
Punjab	.. 12.7
Burma	.. 26.4
Bihar & Orissa ..	.. 12.8
Central Provinces ..	.. 6.0
Assam	.. 6.0

The Indian Road Development Committee was very much impressed by the need of better communications for marketing agricultural produce and pointed out that "good communications in any area will often bring new crops within the range of profitable cultivation." The Royal Commission on Agriculture too laid great emphasis on the direct influence which good communications exercise on the time factor and incidentally on prices as well. They have further remarked that "defective communications between the point of production and the local market hinder the movement of goods and make primary marketing costly, the additional charge ordinarily falling upon the shoulders of the cultivator."

Among the means of transport used on the Kutcha or unmatalled roads, the most important in Northern India is the bullcok cart which does about 70 per cent of the carrying work. The price of a cart is from Rs. 50 to 80 and one lasts for 8 to 10 years. The average load of the cart on Kutcha roads is about 16 maunds and on metalled roads 25 maunds while the speed varies from 1½ miles to 2 miles per hour.

There is ample scope for increasing the carrying capacity of these bullock carts and thereby lowering the cost of transport. The introduction of carts equipped with pneumatic tyres is likely to revolutionise transport in rural areas. W. Sayer has made successful experiments with such a cart but the cost is beyond the reach of an average cultivator. W. S. Read has taken a step in the right direction by suggesting methods for adapting countrycarts to pneumatic tyre equipment. The effect of the improvement made may be estimated thus:—

	Ordinary country cart	New cart
Weight Unladen	.. 942 lbs.	.. 830 lbs.
Floor area ..	28.8 sq. ft.	.. 36.5 sq. ft.
Maximum load	1,312 lbs.	.. 2,952 lbs.

Time taken with similar load for covering 10 miles on

Pucca Road	4 hr. 5 minutes	2 hr. 58 minutes
Kutcha Road	4 hr. 56 minutes	3 hr. 40 minutes*

The series of experiments carried by the Provincial Departments of Agriculture in 1934-35 on the use of carts with pneumatic rubber tyre equipment have proved that the draught of the rubber tyre equipper cart is less than that of the ordinary carts and with the saving in time, the daily outturn of work can be increased.

Next comes asses and mules, "who, on these bad roads serve as the best means for transport for the small quantities of grain of small cultivators." The carrying capacity

*Agriculture and Livestock in India VVI p. 636.

of an ass is 1½ maunds and that of a mule 2½ maunds. In the United Provinces Thelas, Thelis and Sikrams are in great use on metalled roads. The Thela is a four wheeled cart drawn by a pair of bullocks capable of taking a load of 40 maunds and a Theli is a smaller one—bullack cart. The Thela is prepared for short hauls upto a distance of 25 miles to the railway station. The Sikram is a four wheeled Camel Cart with a high wooden enclosure, preminently suited for the trasport of fruits and vegetables. In Southern India, the two bullock Bandy is the widely used form of transport. In the Punjab, particularly in the sandy Thal area Camel is the principal means of transport as his cost of upkeep is very low. There is a proverb—"The Camel earns gold but eats Jal (a cheap grain).

It has been aptly pointed out by Rao Bahadur P. C. Patil that "the Indian farmer has to spend proportionately more on transport. The communication from the farm to the village and from the village to the market is poor. It not only costs more but increases the depreciation charges of the carts and bullocks.* The cost of transport is higher on unmetalled than on metalled roads and depends on a number of factors including the condition of the road, season and the commodity carried. In the Punjab the carting charges on Cotton is 30 to 38 per cent. higher than on wheat.

In an enquiry made into the cost of transportation of Cotton in the Punjab by Messrs. Ajaib Singh and P. Bhullar, it was found that round about Lyallpur the average load per cart on metalled roads was 28 mds. 39 seers and on unmetalled roads 24 mds. 7 seers and the average distance covered by a cart was 16.1 miles. The rate of freight increases with the distance, season of the year, and nature of the road and is influenced to a large extent by the total time which the cartman has to devote on the consignment between loading in the village and unloading it in the market

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*Evidence before Royal Commision on Agriculture. Vol. II Part I p. 510.

after the sale is complete and not on the running time alone. The following table would give some idea of the cost.

1. Madras Presidency (Madura).

Distance	Rs.	Ans.	P.	Charges	Commodity	Condition of road
10 miles	0	4	0	per cent	Paddy	Metalled
6 miles	2	0	0	for 6 bags	Cotton	do
Bellary 9 miles	2	4	0	for 6 bags	Cotton	do
Punjab 27 miles	0	7	0	per md.	Wheat	bad
20 miles	0	4	0	per md.	Cotton	Metalled
12 miles	0	2	0	per md.	Wheat	Unmetalled
U. P. 20 miles	3	0	0	for 20 md.	Wheat	Metalled
Wasawar 20 miles	0	1	3	per. md.	Wheat	do
KohatDt. 18 miles	0	1	6	per md.	do	do
HazaraDt. miles	0	2	0	per md.	do	do
(Delhi)	0	2	6	per md.	do	do

In the United Provinces, the saving in the charges over a metalled road as compared with a bad unmetalled road appears to be less than 20 per cent, and in the Madras Presidency the saving under this head varies from 20 per cent. in the District of Tanjore, North Arcot and West Godavari to 30 per cent in the Kistna District and 50 per cent in Trichinopoly.

Another feature of our road system is the lack of even distribution. While in many provinces important areas are yet undeveloped, there is in most parts of the country great duplication of the means of communication with railways and roads running parallel to one another. The following tables will bring out these deficiencies in our road system; —

Number of villages with a population of 1000 and over not on the public road.

MADRAS PRESIDENCY DISTRICTS

North Arcot	309
Kistna	185
West Godavari	213
Guntur	417
Coimbatore	230

DISTRICTS OF U. P.

Cawnpore	60
Moradabad	82
Gorakhpore	263

In Bengal, the "area more than 10 miles from any railway amounts to 40 percent of the total area with a density of population of 100 and over and the area having a distance of more than 10 miles from either a railway or inland Steamer route is 21 per cent of the total."*

In many parts of the N. W. F. Province produce is transported to the big markets like Hoti from long distances by a chain of agencies the most important of which is the donkey driver who is given very often big amounts as advances for the collection and transport of the produce from the outlying areas. Cotton is often transported in string bags made from palm leaves on the back of buffaloes. In Bengal waterways being more important than roads or railways the major portion of the work of the primary assemblage of Jute and Paddy is done by country boats.

Railway transport is an important factor in the marketing organisation and for the export as well as the internal trade of India. The amount of actual transport done varies according to the harvest, market demand and marketable surplus. The quantity moved by the railway, as the following table will show, gradually rose up to 1928 but declined when the depression set in.

*Report on the Present State of Road & Railway Competition by Mitchell & Kirkners (1933) p. 5,

Amount of Agricultural produce transported in Railways
(In Million Tons)

Produce		1925	1928	1932
Wheat	..	1.62	1.85	1.46
Grain & Pulse		2.99	4.93	3.61
Oilseed	..	3.49	2.79	2.04
Raw Jute	..	0.89	1.18	0.81
Tobacco	..	0.7	0.32	0.28

The services rendered by the railway to marketing may be measured by the facilities it offers to the movement of goods and the charges it levies on the goods. There is no denying the fact that in recent years, the railway systems all over India have made the movement of goods more speedy and have reduced considerably the risk of damage in handling or transit. The vaccum brakes which have been fitted in goods trains have enhanced safety in train operations and accelerated their speed, in the case of main line goods trains from 9.08 miles per hour in 1923 to 11.5 in 1932. The gradual reduction in recent years in the amount of compensation which the railways had to pay for the damage to goods has been brought about by improvements in the design and construction of the wagons, proper locking of loaded wagons, greater care in handling and the increaesd efficiency of the Watch and Ward Department.

Claims for Goods lost or damaged in Class I railways*

1926	..	Rs.	15,21,939
1928	..	Rs.	10,93,139
1930	..	Rs.	7,65,672
1932	..	Rs.	3,66,448

Waggon shortage is a great hindrance to orderly marketing particularly during busy seasons. Mr. G. Shirhati pointed out to the Royal Commission on Agriculture that "it has been observed many times that hundreds of dokras lie in open place in the station compound for want of

*Report of the Indian Railway Board for 1932.

waggons for days together, at the mercy of rain and subject to theft." *In recent years however much improvement in this direction has been effected by the organisation of the Waggon Pool under which the Director of Waggon Interchange receives daily reports from all railways regarding the stage of traffic and has the power to readjust supply of waggons to meet the demand. By the strengthening of tracks and bridges the carrying capacity has been increased for example. in the E. I. Railway from 19 to 22 tons. The doubling of tracks and adoption of new routes have secured a great reduction in the train mileage on the Grand Chord Section of the E. I. Ry. by 50 miles on each train journey and it is possible there to run now 10 additional goods trains. The transport of jute, however, has not been facilitated to any appreciable extent due to its peculiar and complicated nature. The requirements for waggons for transporting jute from the hinterland to the ports of Calcutta or Chittagong very widely from day to day according to the state of market and the continual day to day business which is carried on to anticipate the possible trends of the market so that the railway is put to great difficulties in estimating the actual needs of the day and supplying waggons accordingly. It very often happens that by the time the consignment arrives at the destination, the market has dropped a few points and the consignee wants to wait a few days in the hope of a rise and the waggons are not emptied.

Much, however, yet remains to be done. Although over many railway systems express goods trains are being run, the innovation is yet limited in its scope. The bigger stations no doubt are provided with covered goods sheds with well constructed approaches so as to enable the bullock carts to come close to the goods sheds or platforms and reduce the cost and labour of handling of the goods, but in the smaller stations covered sheds are rare, and dokras of cotton, baskets of fruits and vegetables, bags of flour or rice are not unoften seen heaped up on the open platform at times only imperfectly covered with a wornout tarpaulin.

*Royal Commission Agri., Evidence Vol. II Part II P. 293.

The marketing of fruits is strictly limited by the facilities which the railway offers in India. With proper facilities fruits may be carried over long distances, but the conditions in India are not conductive to it as the fruit has to be transported to long distances through hot and humid regions and the difficulty of arranging the packages in the vans due to their lack of uniformity. In addition to this, the diversity of gauges makes it necessary to tranship goods at different places causing delay and damage to the consignments. The use of refriegerator or insulated vans would to a very large extent expand the area of the market from the point of view of both time and space. The railways took up the question of refriegerator vans as early as 1908 but the proposal did not materialised. Enquiries made at Peshawar in 1912 revealed that the scope for the use of these vans was limited as only 30 tons of fruits were available per day for three months in the year out of which refriegeration would pay in only one month. In 1916 the efforts of the G. I. P. Railway to run insulated vans failed but after many efforts the N. W. Ry. have been able to make the Ice-cooled Insulated vans popular and the G. I. P. and E. I. Ry. also arranging for sufficient ventilation in their fruit vans. Improvements in this direction will revolutionise the fruit growing industry. Poona District, for example, has almost a monopoly in figs for which there is a wide demand in India. Figs no doubt are sent even now to distant markets like Bellary and Madras. "In the absence of any facilities for refriegeration, this fruit has to be picked somewhat unripe, lest it should spoil before reaching its destination. But the prematurely picked fruit does not ripen properly; and therefore does not fetch as good a price as the fruit of proper maturity would yield"*

In the transportation of fruits from Bihar to Calcutta, however goods trains are preferred to passenger trains due to a difference of Rel to Rs. 3 per basket in the freight of fruits sent by goods and passenger trains and also because at the smaller stations the stoppage of passenger trains is very short. Before 1932 the E. I. Railway used to run two special

*Gadgil & Gadgil—Survey of Fruit in Poona P. 116.

parcel trains solely for mangoes from Dinapore to Howrah and most of the fruits used to be despatched by these but with the discontinuance of these trains owing to the faster goods trains the saving in time by express parcel trains is not so great as to make up for the difference in freights. The E. I. Ry. provide two refriegcrated compartments from Howrah to Delhi twice a week. These are merely insulted with zinc and about one ton of ice is put into these vans before leaving the starting point and the railway adminis-tration imposes a surcharge of 25 percent over parcel rates on goods transported by these cars. These vans facilitate the movements of fruits from the Punjab and the N. W. F. Province but they are not of much use for Bihar fruits, as except a few most of the important fruit despatching stations are either on the B. N. W. Rly which has no such facilities or on the Loop line of the E. I. Ry. over which these refri-gerated vans do not run. Fruits from the Madras Presidency to Calcutta are usually despatched by goods trains, the desti-nation principally being Shalimar and not Howrah while fruits from the eastern districts of North Bihar are despatch-ed via Katihar to Sealdah so as reduce the distance between the terminal station and the distributing centres in Calcutta. Fruits of a delicate nature, e.g., lichies, grapes are invariably sent by passenger trains so as to maintain their freshness as far as possible.

Rao Bahadur P. C. Patil has pointed out that railway transport costs about 50 per cent. more in India on wheat than in U. S. A. The comparative cost in Rupees to move one ton of wheat 200 miles in the U. S. A. is Rs. 7.5 while it is Rs. 10.3 on the M. S. M. Railway and Rs. 11 on the G. I. P. Railway. Railway rates exercise a great influence in determining the direction of the trade and there is no doubt that they were originally devised in India with a view to facilitate the movement of raw materials from the interior to the ports, and later on when industries began to spring up in various areas, this tendency operated against the in-dustrialisation of the country and complaints against this discremination became more and more bitter. There is no

doubt that this dissatisfaction is to some extent justified but this is due mainly to the lower cost of haulage over long distances than over short, making the rates appear as telescopic and also in some cases to the efforts of the railway to keep the traffic as far as possible to its own lines in competion with other railways or with water transport, by means of the block rate which is "a high rate imposed by the originating line upon traffic with a view to having for itself as long a lead as possible and preventing it from passing off to a rival or foreign route."

As an illustration of this, the fixation of rates on the B. N. Railway with a view to divert the grain traffic of Nagpur towards the Calcutta port instead of Bombay which is nearer may be cited. "Apparently the traders prefer the former (Bombay Nagpur route) and by that route grain would go under fair competitive conditions but the Bengal Nagpur, intending to carry it to its own port, Calcutta, so manipulates its rates that the trader has the alternative of either sending his goods to Calcutta or paying high mileage rates to Bombay. It imposes block rates on grain to Bombay, which consist of the maximum rate plus a terminal charge of eight pies per maund; while for the identical service on its own route inspite of two terminal services, no terminal charge is levied and the rate is according to ordinary schedule.* The policy has however not succeeded due to the fact that the lower steamer freights at Bombay neutralise the difference in the rates and diverts much of the grain traffic to Bombay. The effect of competition on the fixation of railway rates is clearly seen in the case of the E. B. Ry. In 1928 the freight rate on the E. B. Ry. route from Rangpur to Calcutta was 0.60 pie per md. per mile for drummed jute and the rate for the same class of jute from Narainguni to Calcutta on the rail-cum-steamer route via Khulna was only 0.50 pies.

In the case of sugar, rates were originaly determined with a view to facilitate the distribution from port towns

*N. B. Mehta,—Indian Railway', Rates & Regulations. p. 135

to various inland consuming centres. With the development of a sugar factory industry in Bihar and the U. P., a thorough overhauling of the rates is not only called for but a radical change in the basic principles of rate fixation is also required. With a view to compete effectively with imported sugar, the Indian commodity must be made available at a lower price at the ports and the railways should not give by their rate fixation any undue preference to any centre of production over others in access to a particular market. At present the sugar factories of North Bihar are under a serious disadvantage in comparison to the South Bihar factories in despatching sugar to the Punjab market as the freight from the South Bihar stations on the E. I. Ry. to Saharanpore is 13 annas per maund while the corresponding rate from the North Bihar stations of the B. N. W. Ry. are Rs. 1-2-6.* Then again the railways by their system of charging flat rates for sugarcane are encouraging the factories to go afar for their supplies instead of intensive development of the cane area in the immediate neighbourhood. On the B. N. W. Railway there is such a flat rate for canes upto 28 miles and after that a graduated scale operates in proportion to distance covered with the result that the factories getting their supplies from a shorter distance, say 5 to 10 miles have alsoto pay the rate for 25 miles.

Another feature of the railway rates is that the rate is higher for small quantities than for large, so that they discourage the despatch of small consignments and favour the big traders at the cost of the petty ones. Waggon load rates can suit only the merchants but not the growers, thus direct marketing by the latter is not encouraged. The freights have no relation to the variation in the prices of commodities and they are particularly oppressive when due to the general depression there has been an all round drop in the prices of agricultural produce.

*Report of the Indian Sugar Mills Association page 181.

In the case of cotton, freights were increased in 1918, 1919 and 1922 and these rates are continuing even now though the prices have fallen a good deal. Broach cotton was sold in 1922 at Rs. 487 per Candy and the price fell to Rs. 132 in August 1931, i.e., by 73 per cent., but cotton freight rates for Bombay for stations in the Bombay area as compared with 1913—14 have increased from Khamgaon by 38 iper cent, Khandura by 44, Dhulia by 72 per cent. Amraoti by 80 per cent. and Broach by 179 per cent. Freight rates have also risen in the case of Punjab American cotton which is exported through Karachi, the increase being by 76 per cent from Tando Adam, by 108 from Multan, by 146 from Sargoda and by 207 from Ambala. How a judicious reduction in the rates gives a great impetus to marketing is illustrated by the case of Punjab wheat in May 1931. In April of that year the Karachi Chamber of Commerce represented to the Railway Board that the surplus stock of the previous year amounted to one million tons which with the current year's surplus would be doubled. The price of new Indian wheat was 5s. to 7s. per quarter over export parity which was equal to 13 annas per maund and the only means of pushing on the exports was a reduction in the railway freight to the port by 50 per cent. The Railway Board reduced the freight from the N. W. Ry. Stations to Karachi for 4 months on the basis of a telescopic schedule and this had the desired effect on the marketing.

The Royal Commission on Agriculture have remarked that "freight rates are ordinarily the heaviest single addition to the prime cost of produce exported by rail from the area of production. In a competitive market, they amount to a heavy charge on the gross price ultimately paid for the produce, and to the cultivator who is selling his commodity at a distance, they amount to a substantial portion of the price he realises at the place of sale." This is well exemplified in the case of the marketing of fruits as the following figures from the Bombay Market will show,

Peg of Railway freight to total cost.

Place of Origin	Fruit		Freight
Poona	Guava	..	30.7
Poona	Orange	..	12.7
Nagpur	Mosambi	..	27.6
Ahmedabad	Mosambi	..	18.2
Nagar	Grapes	..	12.2
Nasik	Papaya	..	18.3
Poona	Papaya	..	22.8

The figures of railway charges given by Gadgil also show that in the marketing of fruits in the Poona District, they amount on an average to 27 per cent of the total cost.

In the jute trade of Bengal, the share of the steamer in the carrying work is fast increasing. Between 1913 and 1933 the share of the steamer has risen by 15 per cent while the railway and boats have fallen by 6 and 7 per cent. respectively. The steamer freight rate is settled from time to time by agreement between the Indian Jute Mills Association and the steamer companies combine on the basis of an undertaking that the Mills would make exclusive use of the companies' steamers for their entire carrying work. The present agreement adopted in July 1934 provides one rate for the busy season and the grant of a rebate to shippers, "on condition that they would make exclusive use of the services of the associated Steamer Companies for the entire despatches of their jute during the busy season, whither consigned to Mills or not, on penalty of forfeiting the claim to the rebate in case of any delequency"* While these terms practically mean the concentration of the whole of the carrying work in the hands of the agreement Companies, their freight policy in the past has been most unresponsive to the cause of prices making the freight "a regular deadweight on the trade." While between 1916 and 1924 they effected increases in the freight rates on the plea of higher costs and high prices of jute the rate fixed in 1926 remained practically at the same level

*J. N. Sen-Gupta—Economics of Jute page 84.

up to 1934 allthough the price of raw jute declined from Rs. 12 to Rs. 3-10.

Instances of anomalies of railway rates which have a serious effect on marketing can easily be multiplied. Calcutta is important as a port for the export of oilseeds as well as a centre for the mustard oil manufacture. In recent years the U. P. Mills have proved a serious rival to Calcutta due to the impetus given to them by the railway rates. The rates on mustard seed from the E. I. Ry. stations of U. P. e.g., Cawnpore, Agra, and Etawah to Howrah have risen as follows :

Station	Distance	Rates in 1914	Present Rates @ C/M Schedule
		Rs. A. P.	Rs. A. P.
Cawnpore	631 Miles	0 5 3	0 3 11
Agra	788 ..	0 6 7	0 10 2
Etawah	718 ..	0 6 0	0 9 7
Hathras Killa	810 ..	0 6 9	0 10 4

Transport charges in 1914 represented only 6 per cent of the value of goods and under present circumstances they are as high as 16 per cent. On the other hand, mustard oil from the U. P. towns to Howrah enjoys special rates in wagon loads, with the result that the Calcutta Mills have been hit hard* The difference between the price which the cultivator gets for his cotton at Amraoti in Berar and the price obtained at Liverpool (C. I. F.) is about Rs. 60 per candy and of this about 33 per cent. is taken up by railway freight from Amraoti to Bombay.

Another factor which has an important bearing on the moving of produce is the discrimination between the Owner's Risk and Railway Risk rates for goods traffic introduced on many lines. There is no doubt that under the Railway Risk

*Report of the Bengal National Chamber of Commerce 1933 p. 360.

**Report of the Bombay Chamber of Commerce for 1930 page 160.

Note, the consignment is insured against damage or loss as the responsibility is entirely borne by the railway itself and the handling is consequently more careful. On the other hand in a competitive market the traders have to reduce the cost of transport as low as possible and despatch goods at the lowest rates available, which are usually the rates for goods at owner's risk. Thus the difference between the two is very important and where, as for example, in the case of Ghee the difference is as great as 100 per cent, the merchants are cmpelled to send at Owner's Risk, the alternative of Railway Risk being almost non-existent. In this case, the railway practically puts pressure on the merchants to accept liability for loss or damage to consignments caused by their negligence. The injustice of this policy is bitterly realised by the fruit dealers in whose case, "all the special waggon load rates as well as even half parcel rates on consignments are all Owners' Risk rates. Even the largest consignments obtain no concessions, if they are to be sent at Railway risk; and the small consignments would have to pay a full parcel rate, instead of the half parcel rate, if they are not sent at Owners' Risk". In the case of some of the main agricultural commodities where the difference varies from 10 to 40 per cent the trader is very often unable to take advantage of the railway risk rates owing to the pressure of competition. In some cases the Railway lays down special terms for different kinds of goods or do not provide for railway risk rates at all, e.g., in the G. I. P. Railway the rate for rice from Jhansi to Bombay is meant only for the Owner's Risk and this rate is qualified by the remark that "no other rates will apply". On the same railway, over certain sections the rate for sugar at railway risk irrespective of the condition of wagon load is lower than that on country sugar for a shorter distance at waggonloads on Owner's risks.*

The onus of proof is thrown on the consignor by Railway Risk Note A but where the goods has moved over several railways it is impossible to prove wilful neglect. The Bombay Chamber of Commerce have pointed out that "many

*Gadgil,—Marketing of Fruits page 122.

Railways have demanded Risk Notes for particular reasons such as insufficient covering in the case of Raw Cotton and then under cover of the Risk Note they have repudiated claims for damages arising from causes which would have damaged the consignment in many case, e. g., no covering to cotton bales however sound would protect them against oil, water or coal dust"* In November 1934 the B. N. W. Railway issued instructions that sugar should be accepted only on Risk Note A on the ground that the contents are "inherently liable to sweat and become moist in transit."** This attitude has practically penalised the entire sugar trade while the best way open to the railway, viz., improvement in the conditions of transportation was not thought of. It is desirable therefore that in the interests of trade provision should be made in the risknote in which the onus would lie with the railway to prove that the damage to goods consigned was not due to misconduct but due to negligence on the part of the railway employees.

Then again terminal charges are added on to the freight rates and influence very much the cost of marketing. In addition to the "terminals" in the case of goods in bulk, levies are made as "Crane Charges" and "loading and unloading charges." These charges are based on the amount of handling required at the destination and may be varied or exempted altogether provided no undue preference is shown thereby, although exemptions are sometimes given on some commodities to divert the traffic to some centre, e.g., no terminals are charged on grains, pulses and common seeds booked from Achalganj, Dalmau, Lalganj, Jamnapur, Unchahar, Atrampur etc., to Cawnpore, or on all traffic booked on the B. N. Railway to or from Shalimar from all stations on the Howrah-Jubbulpur, via Gondia section, Nagpur and via Nagpur, etc. Where the cost of handling alone determines the terminal rates, the charge is no doubt justified but where high terminals are used mrely to block a

*Report of the Bombay Chamber of Commerce 1933 p. 188.

**Report of the Committee of Indian Sugar Mills Association 1934 p. 35.

competitive route whereas the same rate is not charged for similar type of traffic for same distances when the traffic is not booked to or from a rival railway or port, there is enough ground for interference by the Government.

All these discrepancies about rates can now, however, be referred to the Railway Rates Advisory Committee which should the given fuller powers not only to adjudicate and make recommendations when grievances are referred to them but to take the initiative and investigate themselves keeping in view all the implications of a forward rate policy. This committee is authorised to enquire and report to the Government of India on the following subjects:—(1) Complaints of undue preference under section 42(2) of the Indian Railway Act of 1890; (2) Complaints that rates are unreasonable in themselves; (3) Dispute regarding the imposing of terminals; (4) The reasonableness of any conditions to the packing of articles specially liable to damage in transit. The committee has amply disclosed the defects of the Indian railway rate system and has served to emphasise the need of a body somewhat more than an Advisory Committee. India requires a Judicial Tribunal on the lines of the Rates Tribunal in Great Britain to which aggrieved parties may refer their grievances, not for mere enquiry but for actual decision and redress.

CHAPTER XI

FUTURE TRADING

In the present complicated organisation of marketing future trading or the making of a contract to buy or sell some commodity with the delivery taking place in the future, has a definite place. It has been aptly pointed out by the Committee on Trading in Futures appointed by the International Chamber of Commerce that, "a properly organised futures market can and in many trades does minimise this inevitable trading risk by providing machinery for the transfer and spread of the risk among a body of professional risk bearers or speculators. The genuine trader is thus able to a large degree to ensure to himself a normal trading profit and to insure himself against exceptional unforeseen losses." So long as the trading risks exist future trading by providing facilities for continuous buying and selling and for information about the amount of consumption, production and export prevents wide fluctuations in prices and promotes stability of trade and industry. The success of such a market depends largely on three factors, viz., (a) a continuously liquid market where there is perfect freedom for the execution of contracts, (b) the size of the market should be large enough to permit of the purchase and sale of large quantities at a time without disturbing the price level appreciably, (c) a market which owing to the proper representation of all the interests concerned makes it possible for the prices to react to the normal changes of demand and supply. It is true that in India, in the case of some of our principal commercial staples all these market conditions are not everywhere present, hence in many cases speculation degenerates into mere gambling, bringing future trading itself into disrepute. Hoffman has remarked that "the farmer has generally opposed the practice of future trading (particularly if prices are low or declining), the intermediate merchandising groups have usually favoured the practice and the consumer

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*Hoffman—Future Trading upon Organised Commodity Markets p. 5.

has taken little active interest except to complain occasionally when prices were high."* This complaint becomes all the more justifiable and the need for a well developed future market all the more great when we consider the irregular system of future transactions in the grain trade.

In the grain trade in the United Provinces there is an indigenous system of future trading which is carried on by Pukka Arhatiyas. Each market specialises in the speculation of its own special products, e.g., wheat in the Meerut District, wheat, cotton and barley in Hathras, cotton and gram in Agra. In each market there is a code of conventions which governs these transactions but which in many cases do not result in fair play to all the interests concerned specially where one section exercises a predominant influence over others. The Chambers of Commerce of these places are trying to revise these rules and to bring about some sort of regulation of future trading. In the Hapur and Ghaziabad markets, the Chambers of Commerce allow dealing in every kind of grain but members are not permitted to deal with non-members except as commission agents. Every transaction has to be put on record by both the buying and selling members or if one or both the parties are non-members, by its member-Arhti and the other party or by their member Arhti and the broker, whose intervention is inevitable. The broker is usually licensed by the Chamber and he records the deal in a quadruplicate note book printed by the Chamber and all the parties to the deal sign the entry in the note book which is later on counter-signed by the secretary of the Chamber. Copies of the form are given out to the parties concerned and one of it is kept on record in the Chamber. These Chambers arrange for arbitration in cases of disputes. Two arbitrators are selected by the parties from amongst the members of the Chamber and if they differ, the President of the Chamber nominates a third member as umpire whose award is final. The Association at Jullundur appoints committees of arbitrators to settle disputes. The charges levied by the Punjab Chambers are quite moderate.

	Commission	Brokeage	Charity	Total
Amritsar	0—2—0	0—8—9	0—0—9	Rs. 0—11—6
Jullundur Trading Co. Ltd.	0—5—0	0—5—0	0—1—0	Rs. 0—11—0

They also lay down the qualities of grain which would be accepted for "futures" contracts. Amritsar does not accept weevilled wheat but Lyallpur accepts it in June July upto ½ per cent. subject to a discount of Re. 1 per cent. At Jullundur, "both red and white wheats are tendered but in case of a mixture of the two, one must not be less than 70 per cent. of the whole."*

The unit of every forward contract (Badni Sauda) at Hapur is 25 tons (68 mds.) or multiples of that and both the buyer and seller have to make deposits with the Chamber as cover and pay a commission of one anna to it for every Sauda of 25 tons. At Ghaziabad the cover is lower but the Chamber's commission rate is four annas. The maximum limit for transactions varies from 1500 tons at Hapur to 60 deals of 600 maunds each at Ghaziabad, but as there is no bar to one dealer's carrying on transactions in another firm's name, this maximum does not exercise any effective check to over speculation. At Amritsar, the largest futures market in the Punjab the unit of transaction is 500 maunds while in Jullundur it varies between 100 to 250 maunds. The minimum which a dealer has to deposit as margin money at Amritsar is Rs. 100 per contract, at Jullundur, Rs. 50 but at Lyallpur it is eight annas per maund of wheat.

Most of these transactions are settled in terms of difference and the amount of cover has to be maintained by making extra payments or refunds according to the fluctuation in the prices. This amount is settled weekly if the difference in the price is small, e.g., below 4 annas, but if it exceeds 4 annas, it must be made good within 24 hours. The cover is refunded when the transaction is finally closed,

*I. Mahendru—Some Factors Affecting the Price of Wheat in the Punjab (1937) p. 50.

"but if the party making some profit has no faith in the credit of the defaulting one, the former may secure its profit from the "cover" amount of the latter by applying to the Chamber up to the noon of the fourth day after the settlement of the transactions when the parties become first entitled to withdraw their deposits. This practice of dealing in differences no doubt saves the parties from the trouble of actual handling and delivery of the produce and thus increases the volume of business but it has a tendency to lead on to excessive trading as large transactions can be carried on if the merchant has enough capital to be able to pay only the possible adverse difference.

Forward contracts commence about 4 months before the months in respect of which they are entered into, e.g., in Hapur they are dealt on the second Badi of the months of Jaith, Savan, Mangsir and Maha and at Ghaziabad the months are Jaith, Bhadeo, Mangsir and Maha and contracts for these months have to be entered from the twelfth Sudi of Poos, Baisakh, Savan and Kartik. It is not required for Badni Saudas that they should be completed only in the month for which they are entered into or that the entire contract sould be settled as the parties concerned may have transferred their respective liabilities to others before the date of maturity, "thus the sellers and purchasers change, distributing among themselves the risks of speculation, the brokers and member arhtis all the while earning their brokerage and commission."*

Where the transaction has to be settled only by the delivery of the goods, the seller has the right of delivering on any date within the 25th of the month when it is due or the buyer may require delivery between the 16th and 27th of the month. In case the seller fails to make delivery in time, the buyer may buy in the market an equal amount on

*In the Punjab, "the final date of delivery of wheat in each market is the last date of the Bikrami calendar month." —I. D. Mahendru—"Some Factors affecting Price of Wheat."

the sellers' account and any loss incurred on the transaction has to be made good by the defaulting seller. The delivery is made through Khattis or in the case of goods from other markets through Kothas. The delivery of a khatti is made by the transfer of the Langot or a memorandum giving full details of the Khatti, and where the grain in the Khatti exceeds the contracted quantity the extra amount is charged on the market rate of the day. Where non-members are parties. Khattis are transferred unopened and this keeps the door open to fraud. The member—arhti-takes delivery on behalf of a non-member but does not make any entry about the quantity in the Khatti and when he sells it on his behalf he delivers a Khatti weighing about 100 maunds more or less than the Khatti he actually received according as prices have varied during this period and on delivery he enters the weight of the Khatti in the account of the client thus making for himself illicit profits. Where the difference is not paid or the delivery is taken within the prescribed period, the Chamber has to complete the transaction by selling the goods at the settlement rate (Mitti Bhao) fixed by the Managing Committee on the last day of the month, Keen speculation goes on in fixing this rate and many dealers try to manipulate this rate to their favour.

Bull and bear operations known as Kharid ki Saude and Bech ki Saude are very common. Where the prospect is of a rise in prices in the near future, the speculator goes on buying futures and if his forecast proves true he proceeds to take delivery and sell at higher prices, thus making a decent profit. These speculators or bulls are called Tejiwala and their Kharid ki Saude transactions result in pushing the prices up. On the other hand if he is of opinion that prices are likely to fall he sells up the futures and if the prices go down he will buy at the lower price and deliver what he has contracted to sell at the higher price. These Bears or Mandiwalas try their best push prices down. By the creation of an artificial demand or supply in the market these transactions serve the purpose of moderating the precipitate rise or fall in prices. Thus the course of trade is made smooth and free from jerks, but as in these markets,

expert speculators are few and the forecasts are often not based on sufficient data, the results of speculations are not always happy to the parties themselves or to the market as a whole.

Where the speculator has no confidence in his forecasts and does not want to undertake the risk of loss beyond a certain limit, he takes recourse to "Options" or Saudas of Teji, Manda or Manrana by which his liability is limited to the amount of premium paid for securing the Sauda while the chance of profit is without limit. These Options are not officially recognised by the Chamber and transactions are carried on brokers' Arhties. In the Teji Sauda or Call Option the speculator anticipating that prices will rise within a short period secures through anArhti an Option to buy within the stipulated period by the payment of a premium which depends on the length of the period, and tone of the market. If prices rise higher than the level anticipated by him, he exercises his option to buy and sells at the higher rate, but if prices do not come up to his expectations or actually fall, he will not exercise his option and lose the premium. Nazrana is the double option to buy and sell and this is taken recourse to when the market is uncertain and no definite forecast can be made.

Unregulated speculation in these markets has produced beneful results in many cases by increasing the number and magnifying the range of the fluctuations in local prices. This becomes all the more evident when the leading dealers of the locality attempt to tamper the market by making large sales and purchases, unwarranted by future conditions.

"In order to trap other Arhtias, the leading Artias often make fool of others. Because of their purchasing an exceedingly large stock of wheat they put other Artias into difficulties. They go on storing wheat in every Mandi. On the other hand, most of the Artias go on contracting Satta bargains and when the delivery time comes they are unable to supply the buyers and thus have to suffer a heavy loss.

So they depend upon big Arhtiyas who are the sole owners of the stock and who begin to release it on higher rates".*

In the Jute trade, future transactions are carried on in (1) a few Exchanges called Baras which have the semblance of organisations run on approved principles but which ultimately degenerate into gambling centres There are separate Baras for loose Jute and Hessian (2) in well organised bodies like the East Indian Jute Association. In the former, the formal written contracts are made out although the transactions are noted in the books of the parties concerned. Delivery of goods rarely takes place and on every Saturday the Bhutan or rate is settled on the basis of which differences are paid on the following Monday. The unsatisfactory nature of the transactions which are noticed in these exchanges makes the case strong for a well organised institution which will secure for the trade in general the benefits of future trading. There is a volume of opinion which is against the organisation of a future market as Jute was a monopoly of Bengal and such a "market was not only unnecessary but was harmful to the interests of trade as an encouragement to overtrading and violent fluctuations under speculative influence." The Calcutta Baled Jute Shippers' Associations had even pointed out that "over a long period of years the only really healthy period which could be called to mind. as enabling the Baling community to conduct a normal simultaneous export business at a profit, had been the interval which had elapsed between the suspension of the old futka market and the opening of the new futures market under the auspices of the East India Jute Association." When it is considered that Jute is liable ordinarily to wide fluctuations in price and with a view to prevent this, it is necessary to secure a continously liquid market where large scale business can be carried without much disturbance to prices, the hollowness of the objection will become patent. The monopoly character of Jute is being assailed in various directions by the development of substitutes. The petty

*(A. Hamid—Wheat Prices in India: Agriculture & livestock v111 p. 268.

grower of Jute is so disorganised and ignorant of market conditions that he is compelled very often to sell at very low prices, thus he derives very little advantage from the Bengal monopoly. On the other hand the existence of a well organised future market would supply him with useful information about the trend of world prices besides making the market steady for him. Among the organised markets the East Indian Jute Association is the most important. Though the Association provides for delivery in its written contracts, as a matter of fact the actual delivery is barely one per cent of the transactions. It is claimed that this Association enables speculators to create an artificial demand and offers better prices to the cultivator ultimately and also that it provides hedging facilities to the trade, particularly the sale of futures against the purchase of loose Jute in the actual market or their holding of pukka bales. There is no doubt that some amount of hedging purchases are made in the Association by the Shippers but the fact, that the rate for future delivery in the Association is higher than the rate in the Calcutta Baled Jute. Association due to the uncertain period for which the seller has to hold the Association Jute as against a definite period laid down in the contract of the Baled Jute Association, goes a long way towards making the facilities unreal. These Fatka or speculative operations benefit only a section of the growers when prices rise as only those who are compelled to sell get some advantage while others who hold up in the expectation of a further rise do not. In the same way when the Fatka prices fall and this fall is reflected in the ready price also the growers who being apprehensive of a further fall, hasten to sell up, suffer losses. Thus as Dr. J. C. Sinha has pointed out that "if it is correct to say that the raiyats as a body get the advantage of fatka prices, it is equally correct that as a body they suffer when the prices fall".* The only remedy therefore is to develop the future market organisations on sound lines so as to contribute to the maximum benefit of all parties. With a view to secure this object, a Committee was appointed by a Conference of all the Jute interests in Calcutta in Feb-

*Report of the Bengal Jute Enquiry Committee p. 59.

ruary 1933. This Committee was of opinion that if the East Indian Jute Association was shorn of some of its patent defects and reconstructed on the lines recommended the desired end would be secured. One great desideratum of such a market should be that it must ensure to all sections in the trade a voice is the management so as to ensure fair dealing for all. With that object in view the Governing Body, it was recommended, should have representatives of Balers, Shippers, Loose Jute Dealers, Mills and Brokers. There should be an independent Tribunal of Arbitration for dealing with paper arbitrations while disputes about quality should be settled by arbitrators chosen by each party. The terms of the East India contract should be improved so as to enable the Shippers largely to use them as hedges in the market and it should provide for the periodical settlement of margins and the settlement of differences. These reforms would certainly place the contract on a firmer foundation, as it would be representaive of all interests, and all sales and purchases would be carried on under written and stamped contracts and the dealers would be given the right of obtaining delivery of the produce within a reasonable period. Another much needed reform is to make the loose jute instead of the pukka as the unit of transaction, as with the latter it is not possible the growers directly to participate in the benefits of this market but this reform must wait a proper standardisation of the grades of loose Jutes. Even in the case of Baled Jute the unit of transactions fixed by organisations like the East India Jute Association is as high as 250 bales which restricts the scope of its operation to the bigger ryots only. With a view to enable the smaller ryots also to share in the benefits of futures market organisations the Calcutta Jute Exchange was started in September 1936 with 50 bales as the unit of transactions. It is hoped that "the level of this unit will keep all and sundry speculators away from the market, and at the same time as it is not fixed too high it would meet the needs of small dealers."

In Cotton, the East India Cotton Association was empowered by Act XIV of 1922 as the sole authority for controlling all forward dealings. This Association has intro-

duced many reforms in the terminal market at Bombay. By the provision of "On" Allowances upto two above the basic grade, the production of cleaner and better cotton has been stimulated. Yet the Act of 1922 was not stringent enough to prevent the development of rival Associations or to check the conclusion of contracts which contravene the byelaws of the Association. The Association is divided into six electoral panels consisting of Millowners, Exporters, Importers, Commission Agents, Jethavalas and Brokers. Each panel elected a Representative Committee of fifteen members of the panel and these Committees formed the General Body of the Asssociation. Each Committee further elected two Directors, one European & one Indian. This Constitution gave greater importance to sectional interests and promoted a compartmental outlook. The Cotton Contracts Act Committee of 1930 recommended that the Board of Directors should recognise only two sections, viz the buyers and the sellers, hence the millowners and the exporters should be grouped into the buyer's section while the others would form the sellers group. In the Board also the grower's interest should be looked after by two Directors nominated by the Government. Under the Bombay Cotton Contracts Act of 1932 the Government has been given the right of recognising and witholding recognition of the Association and of supervising the working of its Board of Directors.

In Liverpool there is no useful hedge contract for Indian Cotton, and as the major portion of cotton trade in Europe is even now conducted on the basis of American prices either on call or fixed, exporters of Indian cotton are very much handicapped in comparision to the exporters of American cotton. One section of traders are of opinion that the Bombay Hedge contract should be based on the Liverpool contract under which any quality of American cotton, if it is of fair staple or better, may be tendered provided it is not lower in grade or value than Low Middling. The great merit of the Liverpool Contract is that as it is wide enough, cornering is not easy and the possibility of undue depression is also avoided as spot rates very often stand at a premium over contract rates.

Bombay hedge contracts are of various types. The East India Cotton Association recognises five permissible contracts; (1) Fully good M.G. Bengal Contract including cotton of the U. P., Punjab, Sind and Rajputana. (2) Fully good M. G. Broach Contract including cotton of the following descriptions—Broach, saw-ginned Dharwar, Punjab American, Surat Navsari, Rajpipla, Dholleras, Kalagin, Cutch and Kadi Viramgaum. (3) Fine M. G. Oomra Contract including cotton from the C. P., Berar, (4) Fully good M. G. Oomra Contract including cotton from the C. P., Berar, Khandwa, Burhanpur, Khandesh and Kathiwar (5) Good M. G. Southern Contract including Westerns, Northerns (excluding "Red"), Bijapore, Cambodias, Tinnevellies and Karumgannies. It is not at all easy to convert this large variety of contracts to a single Hedge Contract on the Liverpool model and the only possible reform lies in broadening the basis of the contract. The Cotton Contracts Committee suggested that the Broach Contract should be retained with the addition only of the Kumpta and Upland growth of the Dharwar District and that the existing contracts in Fine Oomra and Bengal should be left untouched. This widening is merely a palliative and a better plan, may be to widen the contracts by linking them whenever possible, e.g., making C. P. no. 1 tenderable under both Broach and Oomras, while Tinnevellies and Cambodias may be tendered under both Broach and Southerns. This arrangement would tend to make the three main Contracts, Broach, Oomras and Southerns move, more or less, together instead of independently of one another and Cambodias may be tendered under both Broach and would be dependent to a far greater degree on spot prices, which should in their turn regulate automatically the differences between the contracts for tendering purposes".

There is ample scope for improvement in the system of arbitration. At present the two parties nominate their respective arbitrators and if these two differ, a third one is chosen as Umpire, and the first two press the claims of their respective parties. There is no wonder that this system of arbitration does not commend itself to the upcountry merchants who would prefer the settlement of disputes by a

number of wholetime and well paid surveyors to whom the names of parties would not be disclosed and thus the awards would be given on the merits alone.

CHAPTER XII.

AGRICULTURAL PRICES

It would not be possible to attempt here any full discussion of the theory of prices but it may be stated, however that under conditions of unrestricted competition with a rise in prices production tends to increase and the intensity of the desire of consumers to decrease while with a fall in prices the supply decreases and demand rises. Thus "in a competitive market prices constantly tend towards an equilibrium determined on the one hand by the amount consumers will purchase at various prices and on the other hand by the amount that can be profitably produced at these prices". As a matter of fact, however, the elasicity of demand as well as the scope of the producers to change from one product to another affect the free play of these forces and thus exercise a great influence on prices. Under actual conditions too the costs of production are not uniform for all units of the product and vary between producers and with varying volumes of production and ultimately the price which the consumers pay determines to a large extent the scale of production. Therefore the consumer's price for a given supply sets the upper limit to the fluctuation of market prices while the lower limit is determined by the cost of production including the expenses of marketing. Market prices, as distinguished from normal prices, are the actual prices ruling from day to day and they are the result of anticipations and judgments made by sellers and buyers about the different factors of demand and supply in the market.

The question of prices is complicated by the fact that any farm produce is sold at varying prices at a given time and over a period of time, e. g., the price which the farmer receives in his village, the price paid by the wholesale merchant or by the retailer or consumer vary from one another. The complication is further increased by the fact that the same

commodity includes a number of varieties differing from one another in quality, so that we get not one market price but a series of market prices which are interrelated. With a well developed marketing organisation where the dealer has a choice of wholesale markets, the prices in the various wholesale markets tend to be the same, except for differences in transport charges but where due to lack of suitable transport facilities he has no such choice wide variations are noticeable. The following table gives the average monthly rates for wheat per maund for three months in the important wholesale markets of the Punjab and the United Provinces

Mandi.	June	June	August
Lyallpur	Rs. 2—1—9	Rs. 2—0—8	Rs. 2—0—7
Amritsar	Rs. 2—4—9	Rs. 2—4—0	Rs. 2—2—9
Okara	Rs. 2—1—8	Rs. 1—15—1	Rs. 2—2—1
Hapur	Rs. 2—6—8	Rs. 2—7—1	Rs. 2—6—2
Chandausi	Rs. 3—6—0	Rs. 3—5—9	Rs. 3—7—0

It may be mentioned here that the rates at the Karachi port during this period varied from Rs. 1—13—3 to Rs. 1—14—4 per maund or were lower than those at any of these markets. There is a greater disparity in the prices even in the case of the neighbouring Districts. Muzaffarpur and Patna Districts in Bihar are situated on the two banks of the Ganges. The following figures illustrate the difference in prices of paddy in these Districts.

Year		Patna.	Muzaffarpur.
1926.	January	Rs. 3 5 3	Rs. 3 10 0
	July	Rs. 4 0 0	Rs. 4 1 0
1927.	January	Rs. 4 0 0	Rs. 4 0 0
	July	Rs. 4 2 0	Rs. 4 7 0
1929.	January	Rs. 3 10 0	Rs. 3 10 0
	July	Rs. 3 7 0	Rs. 4 6 0
1930.	January	Rs. 2 11 0	Rs. 2 14 0
	July	Rs. 3 2 0	Rs. 3 0 0

In the commodities which do not enter into our foreign trade the same disparity is also noticable.

Arhar.

1925.	March	5 11 0	5 10 0
	August	5 0 0	6 8 0
1926.	March	6 8 0	8 14 0
	August	6 10 0	8 0 0
1927.	March	9 6 0	8 4 0
	August	7 4 0	7 14 0
1928.	March	8 0 0	8 14 0
	August	6 11 0	6 9 0

Jowar (Great Millets)

	1929	1930 (Index Number of prices) 1873 Base year
Bellary ..	275	162
Coimbatore ..	268	232
Trichinopoly ..	233	178
Ahmedabad ..	256	200
Ahmednagar ..	354	254
Belgaum ..	174	135
Dhalia ..	327	200
Surat ..	243	200
Meerut ..	333	207
Mirzapur ..	214 ..	133
Fyzabad ..	300	247

From the figures given above some idea of the range of fluctuations of wholesale prices may be formed. The main reason of the frequency of these fluctuations is that the wholesale business is very much centralised and the merchant is in a better position to forecast the probable changes in supply and demand and take precautions accordingly. The retail prices show very little fluctuation because the consumer is willing to pay the same price for any length

of time and looks upon any rise in price with suspicion and the retailer is also averse to changes in the rate. He safeguards himself against any fluctuations by keeping a wide margin.

The normal relationship between the wholesale price and the retail price and also between the wholesale and the grower's prices is to a large extent governed by the cost of marketing. The important position which the wholesaler occupies in the chain of marketing is no "indication that they determine what price they will pay and receive. It indicates, rather, that imminent changes which have a widespread effect on the retail market, or in the country market, or on the prices manufacturers pay for raw materials are usually sensed in the wholesale market before they become evident to producers, or retailers or even manufacturers" The grower on the other hand is not so advantageously placed as neither is he able to forecast nor is he in a position to vary his production easily from season to season. With a fall in the consumer's demand and the price he is willing to pay, there is a contraction of the volume of business at all the intermediate stages and the ultimate burden falls on the grower and the price he receives is cut down. When the consumers' demand increases this is felt back through all the factors involved and all prices tend to rise so that the grower also shares in this increase. The retail price is usually much higher than the harvest price. Taking the average harvest prices of rice for five years between 1922 and 1927 at six centres in Bihar and Orissa and comparing them with the annual average retail prices for the same period and for the same centres, the retail price has been found to be 7.4 per cent. higher than the harvest price. Prof. S. R. Bose, however, has pointed out that in the cases of many foodstuffs in Bihar and Orissa, the retail prices were lower than the harvest prices. "I have taken the harvest prices at Patna for winter rice, wheat, barley, maize and gram for the fourteen years 1918-31 and compared the average prices over these 14 years with the average retail prices at Patna over the same period with the following results;

	Rice	Wheat	Barley	Maize	Gram
Harvest	Rs.	Rs.	Rs.	Rs.	Rs.
Price ..	5.9	5.8	3.6	4.2	5.2
Retail					
Price ..	5.7	5.2	3.5	4.0	4.6

He has further made an intensive study of wheat prices at Patna for a nine year period and he has come to the conclusion that "the retail price of wheat is lower than the harvest price by more than 10 per cent. of the harvest price while the wholesale price of wheat at harvest is lower than the harvest price by more than 9 per cent."*

Among the other factors which play an important part in determining prices the most important are the conditions under which marketing is carried on and the bargaining capacity of the parties. Where storage facilities are available and the competition acute the prices are apt to be high while the lack of market informaion by the primary producers or the primary middlemen may result in a lowering of prices. The course of prices is to a large extent influenced by the conditions of production in India and in foreign countries. The monsoon exercises a great influence on the prices of all crops particularly on paddy and jute. With the prospect of the failure of crops due to untimely rain or scanty rainfall the prices of paddy register a rise instead of a fall in December-January and sales contract. The following table illustrates the effect of rainfall on prices of paddy in Orissa:—

Year	Deviation of Rainfall from normal	Excess of price over normal
1923	minus 7 p. c.	Rs. 2.4
1924	minus 8 p. c.	Rs. 3.5
1925	plus 17	Rs. 3.9
1926	plus 3	Rs. 4.0

*S. R. Bose—A Statistical Study of the Prices of Foodgrains in Bihar and Orissa, 1861-1934.

In the case of wheat, "stock holders at ports, when they found in the last month that the Punjab and the United Provinces continue to enjoy favourable weather conditions, began to show keenness for an early disposal of wheat, at prices which cannot but be regarded as definitely unremunerative"* Seasonal factors play a great part in causing variations in the price of wheat. From the index numbers of wheat prices prepared by Noel Paton basing his calculations on data collected from six markets in the Punjab for 10 years we find that the difference between the maximum price in January-February and the maximum price in June varies from 13 to 17 points. The rise in prices begins from September and the rate of this rise depends to a large extent on the monsoon, on the failure of which the acceleration may often be by 10 per cent. in a month. Another sudden rise is often noticed in January when the growing crop is liable to risks of drought and heavy rain.

Harvest conditions in foreign countries exercise a great influence on the price of those of our commodities which are subject to export. The development of rice cultivation in Siam and Indo-China is to some extent responsible for the increase in the import of rice into India and consequent low internal prices. While production of rice in India has steadily gone down from 71,678 million pounds in 1931 to 62,962 million pounds in 1934, other countries have registered a steady increase as the following table will show:—

Production of Rice (million pounds)

		Burma	French Indo-China	Siam
1931	..	10,458	9,034	6.727
1932	..	12,228	9,305	8,460
1933	..	12,905	9,376	8.280
1934	..	11,282	—x—	8,572**

*Agriculture and Livestock in India, Vol. VIII, p. 264.

**International Review of Agriculture, Vol. XXVI, No. 3. March, 1935.

The natural result of this is the competition of Siam and Indo-China rice with Burma rice in the Indian market which however has been restricted by the imposition of an import duty on broken rice. The production of rice in 1934-35 has fallen considerably due to poor harvests mainly in India, Japan and China with the result that the prices of rice will show an upward tendency, advantage of which will be taken by Burma, Siam and Indo-China. In the case of wheat, with the failure of crops in the U. S. A. in 1934-35 a brisk demand for Indian wheat in the European market developed and prices in the Punjab showed a marked rise. (2) Local demand by the mills or by the traders for despatching to other inland centres is another important factor. Areas of rice production have invariably a higher level of prices particularly where many rice mills have sprung up and there is some competition among them. In the case of sugarcane however, the existence of Mills in the vicinity has not always acted as an agency for stimulating prices due to the perishable nature of the commodity and the lack of bargaining power of the growers, hence the Government has been forced in the province of Bihar and the U. P. to interfere in laying down minimum prices for sugarcane. In big centres flour mills are large purchasers of wheat and their competition helps to push the prices up. Lyallpur has 4 flour mills and of the arrivals of wheat in the Lyallpur market they accounted for 29.2 per cent. in the first week, 34.3 in the second week, 40.0 in the third and 42.2 in the fourth week and the prices at Lyallpur were 0-2-4 per maund higher than in the Toba Tek Singh Mandi which has no flour mills.*

(3) It may be admitted that in remote parts of the country, quotations of current prices at foreign or Indian port markets are not known to the illiterate producers but this information is available at all important internal markets and this guides the dealers in making their offers. The Bengal Jute Enquiry Committee have observed in this connection that "evidence is conflicting as to the extent to which the grower receives informaion of Jute prices. Some

*Agriculture and Livestock in India, Vol. VIII, p. 280.

say that he is completely ignorant and that he sells his fibre for whatever the Faria or Bepari cares to offer to him. Others believe that the raiyat has little if anything, to learn about prices. The truth is probably somewhere between the two points of view. It is a fact that the raiyat is not always a helpless dupe of the dealer. Moreover, Hats and baling establishments are so common in the jute districts that cultivators never have to go very far for information". In wheat, thde Hapur market prices regulate the prices in the neighbouring Mandis. Hapur receives by telegram the opening prices and "tone" of the markets at Liverpool, London, Chicago, Karachi and Bombay and this information is communicated to the Mandis through an evening daily newspaper called the *Vyapar* published at Hapur. In organised cotton markets like that at Khamgaon, the market receives by telegram early in the morning the Bombay prices of a few qualities of cotton like Oomras, Broach, Bengals etc., and these rates are posted in big letters for public information and the "ruling rate of the day" is to a large extent based on these rates. Increase in exports no doubt gives a stimulus to prices in the interior but in very many cases due to the weak bargaining power of the primary producer and the difficulties of transport very little of the gain accrues to him and it is mainly shared by the middleman who have held stocks. Thus although market information is broadcasted from Calcutta and various suggestions have been made to improve the methods for the dissemination of market prices, it is doubtful how far the grower would be able to derive the benefit.

(4) Speculation has no doubt a steadying influence on prices but unregulated "Satta" trading has the tendency of depressing the market and cause loss to the growers; as well as to the smaller dealers. "A mature speculation is wasteful and disturbs the prices by allowing opportunities for manipulations and tampering with the markets." Besides this the price fluctuations in the world markets are magnified by these speculative transactions in the local markets. Comparing the ready and future rates in the Amritsar wheat

market for the month of August 1934 we find that the ready rate was steady on eight days in the month as against 2 days for the Satta (Asuj) rate.*

There is no doubt, however, that the influences which act on ready prices affect the future prices as well. "The following statement summarises the co-efficients of correlation obtained for the Lyallpur market:—**

Correlation between

Ready prices and Phagan (February—March)	..	+ 0.87
„ and Magh (Jan.—Feb.)	..	+ 0.87
„ Har (June—July)	..	+ 0.51
„ Asoj (Sept.—Oct.)	..	+ 0.81
„ Maghar (Nov.—Dec.)	..	+ 0.80

It is not infrequently found that the prices of Jute in London are lower than those in Calcutta on the same day as the result of speculation at both these markets as a result of which the consuming interests often find it to their advantage to make their purchases in London instead of establishing agencies in India.

(5) Cost of transport—Where 50 to 75 per cent. of the growers sell their produce in the Mandis and the commodity in question has to be transported to the ports for export or to distant market prices, a market which is close to the consuming centres has to pay low freight charges, hence the prices received by the grower are relatively higher than if the railway freight figured more prominently in the cost due to greater distance. The lowering of railway freight exercises an immediate influence on local prices by pushing them up and stimulating movement of goods. A mere rumour about the reduction of freights on the N. W. Railway to Karachi resulted in a rise in the price of wheat in the Punjab markets by about Rs. 0—0—9 per maund.

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*Agriculture and Livestock V III, p. 284.

**I. D. Mahendru—Some Factors Affecting the Price of Wheat in the Punjab, p. 70, 1937.

Compared to gram, maize and other foodgrains, the price of wheat shows much lesser fluctuation. "When the general level of prices is high, wheat rises generally less than would be indicated by the average deduced from the price of wheat, barley, bajra, jowar and gram; when, on the other hand, the general price level is low, the price of wheat does not sink to the same extent as does that of other commodities."* This may be due to the fact that the carryover of the stocks from year to year is much larger than those of other grains and this has a stabilising influence on prices. Wheat enters into foreign trade and has a very wide market and is thus influenced by world prices to a large extent. Another possible explanation is the operation of the process of substitution in response to changes in price. When the price of wheat tends to rise, the "marginal wheat consumer", falls back to the coarser grains, the demand for which increases and the demand for wheat contracts and as a result of this the price of wheat is to a large extent checked. As wheat enters into the foreign trade in years of surplus the Liverpool price to a large extent influences our home prices. "The situation may be made clearer by imagining that the whole wheat world is shaped like a large shallow bowl. In the centre at the bottom is Liverpool. We can then imagine streams of wheat flowing from the great countries of surplus production towards the bottom of the bowl." In order to induce this flow the price which Liverpool is prepared to pay should be high enough and this depends ultimately on the world supply of wheat and the volume of the total world demand for it. The phenomenal increase in the price of Indian wheat in recent months clearly illustrates this. The rise in price has been by about 50 per cent. and although prices have not yet returned to the normal average of Rs. 4 per maund, it rose to Rs. 3—7—9 on the 2nd January 1937 at Lyallpur. The increase in exports has been no less remarkable. The approximate tonnage exported in the first nine months of each year since 1930 was as follows; 1930—

*W. H. Myles—Sixty Years of Punjab Food Prices 1861—1920 (Indian Journal of Economics 1925, p. 26.)

190,000; 1931—18,000; 1932—2,000; 1933—400; 1934—100,000; 1935—9,000 and 1936—200,000. We find an explanation of this when we consider that the crop in Europe in 1936 was the lowest since 1931 and was 113,000,000 bushels less than that of 1935. The North American crop was below the 1932 level for the fourth consecutive year. The Argentine showed a slight increase but Australia's crop was smaller than what it was in 1932. The world's total production, excluding Russia's, is estimated to be 100 million bushels less than in 1935 and 356 million bushels less than in 1933.

Mahendru's enquiry into wheat price in the Punjab brings out the relationship between acreage and prices. "The effect of expansion or contraction of wheat acreage on prices continues to the two succeeding years atleast, becoming more marked in the last year." The increase in the outturn in a particular year depresses the prices of the next two years as the co-efficient correlations between the annual outturn and price given below show:—*

Correlation between:—

Current year's price and current year's outturn ..	—0.027
Current year's price and last year's outturn ..	—0.31
Current year's price and year before-last outturn ..	—0.34

A study of the production and price statistics of winter rice in North Bihar between 1923 and 1931 has produced similar results. It must be stated, however, that from 1928 onwards there was a continuous decline in the prices which was caused by a large number of factors, yet even before that, the fall in the outturn from 11,28,000 tons in 1925 to 9,48,000 in 1926 was followed by a definite rise in prices in the two following years while an increase in the acreage in 1929 was followed by a steady decline in prices in 1930 and 1931.

*I. D. Mahendru—Some Factors Affecting Price of Wheat in the Punjab (1937), p. 69.

CHAPTER XIII.

COOPERATIVE MARKETING

The employment of the cooperative principle for the organisation of marketing and for the solution of some of the main problems arising out of it has met with a considerable measure of success in the West and it unfolds a new avenue of approach towards the problem in India. It has been estimated that in the United States alone about 23 per cent. of the total farm produce is marketed through these co-operative organisations. Jesness estimates that "the total annual volume of business of farmer's marketing and purchasing organisations in recent years has been in the neighbourhood of one and a half billion dollars."*

In the U. S. A. the movement started as the economic side of the farmers' fraternal associations which were grouped under the National Grange. With the rapid development of large scale farming, there was a great increase in the agricultural output and the necessity for finding an effective solution of the problem of marketing became imperative. Local associations and elevator companies were started in various parts which confined their activities to the immediate neighbourhood. In course of time these associations have been grouped under federations and have been able to secure the economies of large scale marketing. Although there is a good deal of divergence in the constitution and working methods of these centralised associations, three classes stand out prominently. (*a*) The Federated Association with groups of marketing organisations as members (*b*) The Centralised Association having no intermediate link between it and the growers (*c*) The Federated Exchange which is a selling agency formed by the local associations. The Southern California Fruit Exchange illustrates the Federated type. The growers first organised the local associations and these were later on grouped into District Exchanges and they in

*Jesness—Co-operative marketing of farm products, p. 21.

their turn formed the Central Exchange. In this organisation, "the grower picks, the local association packs, the district Exchange bills and the Central Exchange sells the fruit".* The California Prune and Apricot Growers' Association is a purely Centralised Association with the growers only as members who are under a district contract with it. Associations of this type are planned by business experts and instead of the structure being gradually built up from bottom by voluntary effort, co-operation is usually superimposed upon the members. The Federated Exchange, on the other hand is the creation of local associations and has no direct touch with the growers.

True co-operation is possible only where the growers control the policy of the Federation through their local association and in this way can promote contentment and prevent friction. In the Centralised Association on the other hand, although the grower-member's vote is very important, in many cases the Association seizes into its own hands the right of fixation of prices and the control over standardisation and distribution, thus reducing to the vanishing point the freedom of the grower. In the Federation the local associations being based upon geographical divisions, are more likely to promote the co-operative spirit than the centralised type which has to employ various methods, e.g., propaganda in farm bureau centres, bulletins and field agents, to keep up the interest and ensure the loyalty of its members.

The contract binds the member to supply the Association with the stipulated quantity of produce and at the same time ensures the association a definite supply and this forms the main feature of the Co-operative Marketing Organisations of the U. S. A. By this method, disloyalty is penalised and the supply of produce is regulated. These contracts are usually of two types:— (1) The Agency Contract by which the ownership of the commodity remained with the grower and the Association was merely his selling agent. As it was not possible to raise funds on the pledge of the produce, on

*Mears & Tobriner—Principles and Practice of Co-operative Marketing pp. 80.

the basis of this contract, the more popular type now is (2) the sale and resale contract by which the title passes on to the association which promises him a proper share of the proceeds of the sale. The duration of the contract may be from one to ten years, although the short period contract, renewable every year, is more popular. In some regions, "Continuing" contracts are used, by which the contract obviates the necessity of renewal at frequent intervals. The contract is automatically renewed every year unless either party cancels it at any time between two seasons. Some associations include the marketing contract in their bye-laws so that as soon as a grower accepts the rules of the association and becomes a member, he enters into a binding contract to supply the stipulated amount of produce.

In the marketing of grain in the U. S. A. the farmers' elevator companies play a great part. The earlier companies served the community at a particular exporting point and had very little co-operative character, but recent organisations are mainly co-operative. A novel feature of these elevators is cash payments to the member on delivery instead of payment after sale. In the U. S. A. the organisation of grain elevators at different centres came first in the order of development, while in Canada with her slow agricultural expansion, the organisation for terminal marketing preceded the country elevators. The United Graingrowers Ltd. of Manitoba after having organised their marketing at the terminal end have installed a chain of country elevators through which the supply is controlled. In recent years in the U. S. A. the organisation of the cooperative marketing of grain is proceeding on the Canadian model.

Co-operative development in the marketing of cotton in the U. S. A. is of recent growth. The difficulties of proper grading and warehousing by independent Co-operative associations proved at one time the main causes of the failure of efforts in this direction. In 1920 the Oklahoma Cotton Grower's Association was organised with its jurisdiction extending over the entire State. It had no share capital and it looked after the enlistment of members and securing of

the members' produce under a seven years' contract while a separate Association organised on a share basis arranged for the warehousing of the members' cotton. These State Associations have been grouped into an apex sales agency called the American Cotton Growers' Exchange.

In the marketing of such perishable commodities as fruits and vegetables it was inevitable that centralisation should prevail over local initiative. The fruit marketing organisations of California present a wide diversity of forms and marketing methods. In some organisations, e. g., the Citrus growers, the local associations were federated into the District Exchanges and the Central Fruitgrowers' Exchange. The fruit is assembled, graded and packed in the packing houses of the local associations. The Central Exchange which is organised on a share basis, employs a large staff of representatives in different markets through whom the actual marketing is carried on. The Central Exchange also arranges for transportation facilities and improvement in methods of growing and looks after the publicity work. The success of this organisation is mainly due to careful standardisation and proper distribution.

Before considering the scope of organising agricultural marketing on co-operative lines in India, it would not be out of place to make a rapid survey of the Cooperative Marketing in Europe. Pride of place in this survey should be given to Denmark which has within a short time succeeded in reorganising her agricultural economy on a cooperative basis and has, with State aid, built up her marketing organisation with the main purpose of capturing foreign markets. Credit societies exist no doubt but Sale and Supply Societies on the commodity basis predominate. Primary Societies are grouped into Commodity Associations which are in their turn federated into the Central Cooperative Council. These Commodity Associations have no share capital but are on the principle of unlimited liability. Every member has to enter into a contract for marketing his entire produce through the Association for a fairly long period and the produce is pooled before marketing. Grading and the testing of

the produce is performed with great care and this accounts for the ready demand which the Danish Cooperative produce meets within the foreign market.

In Germany the primary credit banks in villages carry on the sale of grain while in many parts of the country, a group of banks pool together their resources and start grain elevators. In recent years a strong centralising tendency there has become perceptible as Central Banks and landowners have started huge elevators and marketing organisations meets with in the foreign market.

The value of international contact to the cooperative movement is well illustrated in the development of the Wheat Pools in Canada. The Pool was started as a war measure and the Wheat Board was given a complete monopoly of the marketable crop with sole powers to arrange for its distribution. The success of the Pool in ensuring a good price to the grower gave rise to a demand for its continuance even on voluntary lines in 1923 and in course of three years, these Pools succeeded in securing under contract 21 million acres. Starting work without any elevators and working in conjunction with elevator companies the Pools are gradually acquiring elevators and other handling facilities. The Pool has representatives in all the leading countries and 75 per cent. of the wheat handled is exported direct. The contract with the members is for a period of 5 years and the member on delivery receives a part of the price, the rest being paid on sale after the usual deductions are made. The local organisations are grouped into regional bodies which form the central selling agency which lays down the general sale policy and controls the marketing organisation.

India has not many remarkable achievements in the field of Cooperative Marketing to be proud of. The Cooperative Act of 1904 restricted the development only to the organisation of credit societies and its scope was not extended till 1912 so as to enable the organisation of Cooperative Marketing, yet the emphasis on Credit Cooperation has still continued and it was not recognised that "the

question of organised marketing is of greater national importance than that of rural credit. To supply credit requrements of the ryot is important but it is not so much so as it is to cure the diseases from which the indebtedness arise."* The onesidedness of the development will be borne out from the following figures representing the results of the attempt to organise Cooperative Marketing during 18 years between 1912 and 1930.

Province	Number of sale societies	No. of Primary societies	Membership of sale societies	Membership of Primary societies
Madras ..	73	14.552	5.261	9.77,108
Bombay ..	81	5.768	15.142	5,72,676
Bengal ..	108	23,490	31,606	7,60.184
Bihar and Orissa ..	2	9.150	50	2,54.462
United Provinces ..	42	5,551	2,436	1,47,736
Punjab ..	26	20.578	4.765	6.79,616
Central Provinces ..	7	4.056	775	76.615

It must also be stated in this connection that a large percentage of the credit societies grant loans to the members of agricultural primary credit societies for trade or for payment of rent and other emergent expenditure with a view to enable the ryot to hold up his crop or to market it to the best advantage. The history of Cooperative Marketing in India is literally strewn with the wreckages of past attempts and it is a record of faulty organisation, ignorance of business knowledge, and general inefficiency, which converted in many instances seeming successes into hopeless failures, and put a brake on enthusiasm and progress. In the midst of these failures and general stagnation, a few bright patches attract attention, e. g., the Cotton Sale Societies in the Bombay and Madras Presidencies and the Commission shops

*Central Banking Enquiry Report, page 726.

of the Punjab while the failure of the first large scale attempt to market Jute cooperatively in Bengal has a great lesson for the future.

It is but natural that the earliest success in cooperative marketing in India would be with cotton, which figures so prominently in our foreign trade and which discloses so wide a range of fluctuations in prices. In the Bombay Presidency, the cooperative marketing of cotton has made great progress in the Karnatak Division, the Surat District and Khandesh regions which produce some of the best varieties of cotton in Western India. The Hubli Market, where the earliest Cotton Sale Society was started, commands about 42 per cent. of the cotton grown in the Karnatak. The factor which may be considered to have contributed to its initial success was the attempt to start as a seed store and to push on the cultivation of improved varieties and the assistance it gave through the agency of the Department of Agriculture to the proper gradition of the raw cotton. The Society has a membership exceeding 2,600 but it deals with non-members also. On arrival at the Society's office, a sample is taken of the cotton and it is weighed and a receipt is issued. The sale takes place on the basis of the quality of this sample. In the case of superior varieties the sale is usually by auction and while cotton of inferior qualities is sold by private treaty. The ginning is done in the factory of the buyers who are agents or contractors of the Bombay firms but the Society is making efforts to gin member's cotton with a view to supply direct to the Bombay Mills. Member's cotton may be deposited in the Society's godowns on the basis of which the Society grants an advance not exceeding 60 per cent. of its market price. The neighbouring Sale Society at Gadag has a large number of rural credit societies as members which grant short term loans to their members on condition of marketing their crop through the Sale Society, which in its turn also gives an advance on the security of the produce deposited in its godown but the total credit does not exceed 75 per cent. of the market value. The Gadag society was started in 1918 with 191 members and between 1919 and 1934 its membership has risen by 253 per cent. and the

quantity of raw cotton sold by it by 988 per cent. The charges realised by the society on sales are at market rates but the member is given a bonus at the end of the year on the amount of business transacted by him.

The humble beginnings at joint sale made at Sonsek in the Surat District in 1919 by 13 cotton growers have assumed very large proportions and at one time the Sonsek society extended its sphere of influence over 32 villages. In recent years however some of these villages have been taken to form the Talad group. The Sonsek society had in 1935 a membership of 553, a share capital of Rs. 20,000 and its average annual receipt of raw cotton for sale amounts to 41,000 maunds. This cotton is ginned in the Purshottam Co-operative Ginning Factory started by this society so as to break the monopoly of the local ginners and improve the quality of ginning. The Factory charges Rs. 3-8-0 per bhar for ginning while the market rate was Rs. 5 and it gives a rebate and bonus on trade done and dividend to shareholders. The success of this venture has been remarkable. It started in 1927 with a share capital of Rs. 30,000 and a loan of similar amount and in course of 8 years it has been able to repay the loan, and set apart about Rs. 60,000 in the Reserve and Depreciation Funds, while its annual profits are on the average well over Rs. 10,000.

A striking feature of the Sonsek Society is that although there is a provision in its bylaws for the compulsory delivery of cotton to it, on the failure of which a member is liable to be fined Rs. 50 and have his shares forfeited very few cases arise where loyalty has to be enforced. The members have realised that it is more advantageous to deal with the Society than with the dealers, who, no doubt give out large sums as loans but deduct a discount of 10 per cent. before payment and cheat at the time of weighment of the produce while the Society lends at a lower rate of interest short term loans at Rs. 4 per acre.

A recent development is the organisation in 1934 of a Cooperative Ginning and Pressing Society at Surat for the purpose of ginning the cotton brought to the societies affiliat-

ed to it and of starting ginning factories at suitable centres where there are groups of Cotton Sale Societies. This factory has succeeded in breaking the monopoly of the local presses and has lowered the charge from Rs. 5 per bale to Rs. 3/4/-. "The most striking fact about the Gujrat sale societies is that the cotton is not only ginned but also graded and the cotton of different members belonging to the same grade and class is allowed to be pooled and sold as a lot to the buyers, members agreeing to accept the average pool price."*

Another stage in cooperative marketing has been reached in Surat by the organisation of a Sales Union with the Cotton Sale Societies and the Ginning factories as members. The Union organises new Sale Societies, arranges for the better type of seeds and looks after the grading of cotton, but its main task is to secure purchasers for the ginned and pooled cotton of its members. The Union, by its capacity for collective bargaining, is able to obtain good prices and sell at the best advantage and this accounts for the rapid development of its business. In 1931 it handled about 6 per cent. of the cotton sold at Surat and in four years its share has almost doubled.

The Loan and Sale Societies of Madras Presidency differ in many important details from the Surat Sale Societies mentioned above. The biggest Society is at Tirupur, the most important cotton market in the Coimbatore District. Originally it was started in 1927 as an agriculturists' supply society and gradually it undertook the introduction of Co. 2 cotton and the marketing of members' produce. It has a membership of over 900 including 67 village credit societies. These societies give short term loans to members on condition of their selling 1,040 lbs. of cotton per head through the sale society, but this rule is rarely enforced. Recently the sale society has started a branch called the Cotton Growers' Society which gives short-term loans to the individual members of the village credit societies which are usually on the

*Cotton Sale Societies in Bombay and Madras by K. C. Ramkrishnan, (Indian Cooperative Review, Oct. 1935.)

basis of unlimited liability. The Sale Society does not undertake to gin cotton and sell it as lint. The society had in 1927 a membership of 197, share capital of Rs. 14,740, and did business to the value of Rs. 88,000 while in 1934 the membership rose to 811, share capital to Rs. 20,800 and sale proceeds to Rs. 4,04,000. Its reserve fund amounts to Rs. 6,700, and although it enjoys a cash credit from the Coimbatore District Bank, it has few occasions to use it as it is able to attract deposits at a lower rate of interest. It cannot be denied that judged from the standard of the Gujrat societies, this society has done very little beyond giving crop loans to the members and acting as their selling agent. In striking contrast to the sturdy leadership of Surat cooperators and the absence of Government aid, is the amount of spoon-feeding which the Tiruppur Society receives at the hands of the Cooperative and Agricultural Departments and recently of the Indian Central Cotton Committee.

Of the other Sale Societies the Koilpatti Society has made a phenomenal progress during the past decade. Its membership has increased from 25 to 842, and the quantity of produce handled has risen from 163 candies of lint and 259 pothies of Kapas in 1927 to 4,823 candies of lint and 5,335 pothies of Kapas in 1932. This Society is responsible for the marketing of about 25 p. c. of the cotton arriving at the local market. This unique success is due "to the type of members who compose the Society. The members are all drawn from the well-to-do Naidu and Reddi ryots who are actuated by strong feelings of communal solidarity. Furthermore they are substantial ryots owning very large sized farms. They have larger quantities to sell and can afford to sell them leisurely"* In contrast to the success of this society may be cited the instance of Dindigul Society mainly composed of very small farmers. The membership is too small being 71 in 1934 and the society handles only 3 per cent. of the total cotton arriving at the local market. There are 75 commission shops in the locality and they give liberal

*Cooperative Marketing of Cotton in S. E. Madras by J. S. Ponniah—Indian Cooperative Review 1936, p. 370.

advances free of interest and allow their clients to store their produce in their warehouses without any charge, but they make up their losses by charging very high rates of commission. The Cooperative Society charges the market rate of commission without giving them the same financial assistance during the cultivation season. "Thus it is the superiority of the private marketing system that deprives the local Cooperative Marketing Society of its business and makes its position so small."

The most noteworthy contribution of the Punjab to the Cooperative Marketing is the development of the Cooperative Commission shops. When the Canal Colonies were extended and an impetus was given to the expansion of wheat cultivation there, a serious attempt was made to check the evil practices of the petty middlemen by starting commission shops on cooperative lines. In 1919 the first shop was started and and now there are 22 handling grain amounting to 7 lakhs maunds valued at Rs. 19 lakhs. In the Lyallpur District about 30 per cent. of the agricultural produce is marketed cooperatively. The object of these shops is (1) the purchase and sale on commission of the seed and other requirements of the members (2) sale on commission of the agricultural produce of the members (3) the promotion of the use of improved varieties of seeds by members. Membership is drawn both from individuals and coooperative societies. Advance may be given to a member upto 75 per cent. of the estimated market value on delivery of his produce. Attempts are made to sell at the best advantage and the balance is paid on sale.

The rules of the shop provide for compulsion bothways, as it is incumbent upon the society to accept for sale all agricultural produce supplied by the member, who in his turn is also bound to deliver for sale the whole of his produce. Inspite of the many benefits conferred by the shop, the loyalty of the members is at a discount, about 40 per cent. of the membership does not usually deal with the shops. Among the reasons of disloyalty as enumerated by Khan Muhammad

able that most of the successful institutions are those whose Bashir Ahmed Khan* the most important are:— "(1) The indebted members do not come to the shop because they are afraid of the values being set off against their previous loans (2) those members, who are indebted to the brokers, are obliged to sell to them, (3) there are also instances where means of communications and methods of transport are most important factors in marketing (4) there is discontent in some places for failure to declare dividend or to give rebate (5) some of the shops handicaped themselves by investing large sums in sites and buildings for godowns (6) there is the danger of communal dissension which is the worst plague of all."

The progress made by the commission shop is no doubt very much great when one realises the ignorance and illiteracy among its members, the lack of business experience of the management and the boycott of the local dealers. Boycotts have been too frequent and for all sorts of reasons. One society was boycotted for declaring a rebate of six annas in the rupee. "The Jaranwala Shop was boycotted because in the Municipal election the Changars (men who keep the grain platforms clean) refused to vote for a candidate and were dismissed by all the shops in the market except the Commission Shop."

The shop has encouraged the petty cultivator to market his produce himself instead of depending on the village grain dealer for the same. It suffers, however, from several serious defects the most important of which is that it sells mainly to the local merchants and makes no effort to put itself in touch with the exporters. This is inevitable as it sells the produce of its members in separate lots and does not pool or grade it so as to render it suitable for export. The rule enforcing the loyalty of the members should be made more stringent. It is a common experience that the viola-

*Co-operative Commission shops in the Punjab by Khan Muhammad Bashir Ahmed Khan (Indian Co-operative Review. October 1935.)

tion of these rules is usually initiated or connived at by the members of the managing committee, who are the most influential members of the village hence some external agency should be entrusted with the enforcement of these rules. The Punjab Registrar notes in his Annual Report that "it is not-clientele is composed mostly of ex-soldiers, whose commonsense qualities, keen spirit and discipline are factors of great value in enterprises of this nature. The Arifwala Society's membership is preponderingly military and that of Khanewal very largely the same; the Renala Fauzi Union is exclusively military and all these had outstandingly successful years." Shah and Dawar state that all the markets in the Lyallpur District they enquired into had Co-operative shops. "911 cultivators returning after making sales in markets which had such shops were asked as to whether they had sold their wheat through these shops, bnt only 91 (10 per cent.) had done so and the other 820 (90 per cent.) had sold through Arhtias." The reasons given by these cultivators for or against selling though these co-operative organisations bring out into bold relief the strength and defects of Co-operative marketing.

Reasons for Sale.

Member of the Co-operative shop ..	15.4 per cent.
Expectation of fair dealings ..	13.2 per cent.
Lower rate of Commissions and other deductions ..	43.9 per cent.
Communal or class considerations ..	24.2 per cent.
Miscellaneous ..	3.3 per cent.

Reasons against Sale.

Ignorance of the existence of the Co-operative shop ..	39.4 per cent.
Loans in advance not available ..	15.5 per cent.
Taken advance from Arhtia on condition to sell through him ..	3.2 per cent.
Long established connection with Arhtia	28.3 per cent.
Find no special advantage in selling through the Co-operative shop ..	2.1 per cent.
Miscellaneous ..	11.5 per cent.

The Co-operative marketing of Jute was undertaken in Bengal as early as in 1924 with a view to give the grower a better return for his labour. It was realised that the organisation of stray Jute sale societies handling small lots of jute will not serve the purpose as the Calcutta Jute Mills would not buy small quantities; nor would they accept any consignment unless the quality was guaranteed. To solve this difficulty a big scale organisation was projected and between 1924 and 1927 as many as 10 sale societies were started at important jute marketing centres. The total quantity of jute purchased by these societies between 1924 and 1929 amounted to 1,870,000 maunds but the cost incurred in establishment was as high as Rs. 5¼ lakhs and the profits were as low as Rs. 67,000. This organisation however succeeded in securing its "C. O. .S." mark accepted as a reliable mark in the trade and the prospects of the society appeared to be quite favourable. The society had made an initial mistake in buying outright the produce of the members and undertaking all risks from the time of purchasing and sale. The steady fall in the price of raw jute synchronised with the development of the Jute Society with the result that

Average Annual Price of Jute (Calcutta)

Bales of 400 lbs.

1925	Rs.	111	9	9
1826	Rs.	98	11	6
1927	Rs.	76	6	0
1928	Rs.	75	0	11
1929	Rs.	71	4	0
1930	Rs.	50	4	9
1931	Rs.	37	5	6

a large portion of their funds were locked up in raw jute which had to be sold up at loss. The overhead cost, which with the expansion of business would have been quite moderate now proved too heavy and all these combined to bring on the liquidation of the societies. Thus ended the first attempt to organise on a large scale the Co-operative marketing of Jute in Bengal,

There is no denying the fact that the Co-operative marketing of jute presents greater difficulties than the marketing of cotton or wheat. The difficulties of transport in Bengal and the scattered nature of the jute growing areas make the task difficult enough while the disinclination of the ryots to part with his produce unless he receives full value for it and his conviction that his jute is better than the average quality in the lot leading to disputes about the allotment of his share of the price make the prospects of the introduction of commission sale or pooling all the more difficult. It has been suggested that the cooperative structure should be built from the bottom upwards with the Village Sale Society arranging for the joint sale of the produce to representatives of balers visiting the village. This would no doubt give the growers the benefits of the collective bargaining but would not lead to the removal of any other link in the chain of middlemen. Even if the village society gives advances to the growers against the delivery of the produce, it will be difficult for it to hold up the crop for a rise in prices as adequate warehousing facilities do not exist, hence the profits to the grower will not be considerable. "Cooperative Societies would serve little useful purpose unless they could, by pooling the resources of individual growers, give them the capacity to hold the stock against a favourable market and to sell at the best market"* With a view to achieve this it is necessary to build up a Provincial Wholesale Society with the village sale credit societies as its units. The Sale Society would advance upto a stipulated percentage of the value of the produce on delivery and the jute would be sorted and graded by it. Any member of the Credit Society would be given credit by his society for the value of the jute delivered by him to the Sale Society. At the apex of the organisation, the wholesale society would arrange for the financing of the societies and the sale of the societies' produce and put the village society in direct touch with mills or exporters. It would further undertake the work of the final assortment and bailing of the jute and give directions to the societies

*Report of Bengal Jute Enquiry Committee, p. 175.

through its branches about market prices and purchases. With a view to ensure a large supply of produce to the village societies, which would go a long way towards securing the success of the organisation, it would be necessary to introduce compulsion by legislation, making it obligatory on the minority to sell through the society if a major portion of the villagers have agreed voluntarily to market their produce through it.

Gosaba in Bengal marks the realisation of the dream of a cooperative commonwealth which Sir Daniel Hamilton, the merchant-idealist of Calcutta saw some years ago. The Gosaba settlement started its cooperative career with a number of credit societies in 1916 which were grouped under the Gosaba Central Cooperative Bank in 1924. After the people had become familiar with the cooperative principles, it was considered desirable to start a paddy Sale Society in 1922 so as to eliminate the numerous intermediate links in the marketing chain. The Sale Society was followed by a Rice mill in 1927. The Society had to face, in its early life, great difficulties caused by the fall in price due to over production in Siam and Indo-China but it has fared better than the most of the cooperative sale societies of Bengal. It is now linked with the Central Paddy Sale Society of Calcutta, which is the apex organisation of the cooperative marketing of rice in Bengal.

In Madras Presidency some progress has been made in the cooperative marketing of paddy mainly where the bigger ryots have agreed to join the cooperative organisation. The Nellore Paddy Sale Society has made a special arrangement with a private Rice mill to get its paddy milled at 8 annas per putti lower than the market rate. The Society pays the ryot an advance upto 60 per cent. of the market value of the paddy deposited and supervises its milling and arranges for the sale making an allinclusive charge of 12 annas per putti.

The membership of the Nellore Society includes 21 agricultural societies and 89 individual members. The business is well managed and the cost of management is low, yet the

profits are quite low due to the fact that the outside merchants very often undersell the society by adulterating the famous Nellore Molagurukulu rice with inferior varieties Karlakadda, Thellasamba etc.
The petty ryot however is not however benefitted much as he likes to have full price on delivery and "in milling there is some inconvenience and slight loss to the ryot handling smaller lots than 10 putties." The Madras Paddy Sale Society started in 1934 advances upto 75 per cent. of the market value and charges interest at the rate of 7½ per cent. The warehouse exhibits the samples of the paddy in stock which were examined by the buyers who are mainly the local rice millowners. The lots are put to auction and usually the payment is paid on the spot, but in case of a few approved buyers, a week's credit is given. In March 1935 a conference was held at Chidambaram to devise ways and means to develop the cooperative marketing of paddy. "The whole question resolved into 3 main heads: the cost of transport to the godown, provision of godown accommodation; the care of paddy during storage; and lastly the fluctuation of prices. The suggestions put forth at the above conference are worth examining. Some were in favour of godowns, say one in a group of villages with a responsible man in charge of the godown. Paddy has to be examined now and then during the long storage. It has to be dried, aired and spread out at short intervals. It was decided that honorary supervision was out of the question. The storage and the petty charges would work out at 25 per cent. per annum to the produce and the conference decided that it was not a paying proposition as the average maximum rise in price between harvest time and July is just this 25 per cent.*"

Very recently the organisation of sugarcane growers for the efficient marketing of their produce has been taken up in Bihar and in the United Provinces. The objects of these societies include (1) facilitating the sale of cane at a fair price (2) improving the quality and quantity of the yield (3)

*T. Adinarayana Chetty: Cooperative Marketing of Agricultural Produce in South India, 1935. p. 28.

removing difficulties of transport from the field to the factory (4) general improvement in the economic condition of the canegrowers. The bylaws provide for the cooption of an outsider evidently a representative of factories on the Managing Committees of the societies with a view promote better understanding between the two parties and remove causes of friction. Small advances are given to members but they are recovered immediately after from the price paid for the cane. Upto the end of 1936 in Bihar 150 societies have been organised mainly in North Bihar. Some of the leading sugar manufacturing firms like Messrs. Begg Sutherland & Co., Octavius Steel & Co., Birla Brothers, Gupta Brothers, Ambalal Sarabhai, Mahammad Hanif and others have expressed their readiness to encourage these societies by entering into contracts with them for the purchase of a certain quantity of cane and have promised a fair rate of commission but a large number of firms have not yet extended their support and are suspicious of these new developments. In the United Provinces the number of societies has gone up from 26 to 111, some of these are close to the Co-operative Sugar Factory at Biswan. The societies make advances to their members and sell them improved "seeds" on the security of their crops and act as the agent for the sale of the produce to the factory. No commission is charged from the growers but instalments of the shares are taken collecting one seer extra per maund of cane purchased. The market price is paid and arrangements are made through a paid staff for fixing the dates of supply and for organising delivery to the factory. A new departure is the organisation of societies in areas where there are no vacuum factories for the purpose of making sugar by means of the open pan process.

Success of this venture will to a large extent depend on the cooperation of the factories concerned and as we have already stated this has been forthcoming to a certain degree but it is necessary to think of some punitive provision under which any recalcitrant factory may be penalised for wilful refusal. The Government may encourage this movement by giving a rebate on the excise duty to those factories who have to buy from these societies.

The brief survey of some of the leading cooperative organisations in India points to the imperative necessity for making a more intensive effort to solve the problem. Success in cooperative marketing would depend to a large extent on (1) Organisation on commodity basis on a large scale, preferably with a jurisdiction co-extensive with the area producing that commodity as a staple crop. Small scale organisations started on locality basis will prove ineffective owing to their inability to employ adequate staff and to control a large proportion of the supply in order to influence the market. The success of the cotton sale societies in Gujrat is in a large measure due to their handling a large volume of produce. Connected with this is the problem of restrictive dealings with the members only. The association of the private traders in the management of the Co-operaive Marketing Societies has been unavoidable but should be dispensed with as far as possible. Sale societies have carried on transactions with non-members in almost all the provinces but have not paid them any rebates, so that the non-members' business has gone to increase the profits and reduce the overhead charges of the society. (2) the grading and pooling of the produce. This is required not only to secure the cultivators proper prices on the basis of quality of his produce but avoids causes of suspicion and dissension as every lot sold is considered part of the whole of the same grade and the sale proceeds are pooled and distributed pro-rata among the members. One of the main reasons for the failure of the Jute Sale Societies of Bengal was the failure of the societies to promote the pooling of the Jute tendered by the members with the result that it had to be purchased outright by the society and even then the members had the feeling of not having received proper price for their produce. (3) Binding contracts—It is true that the sale societies provide for the compulsory delivery of their produce by the members on the failure of which they can be penalised. but as a matter of fact this rule is observed in the breach as the members of the Managing Committee are in many cases themselves guilty of this offence. Besides these contracts can only be enforced under the Co-operative Act

and not in the ordinary Courts and this procedure is not at all effective. It is therefore necessary to provide for compulsion on a wider scale so that these binding contracts may be effectively enforced. (4) on the methods of marketing. With a large sized organisation it is possible to employ an expert staff engaged in studying markets at home and abroad, framing marketing policies and advertising campaigns. The California fruit growers' exchanges have created a world market for them by developing new methods of preparation and handling of fruits and also by successful advertising. In India, the Tea industry is devoting the funds derived from the cess on the exports to publicity at home and in the United States. (5) on credit—By the provision of adequate warehousing facilities and the grading of produce, it would be possible to raise funds on the basis of the warehouse receipts and give advances to the members, so as to enable them to hold up the produce if necessary. During the past decade, Co-operative Banks in many parts of India have attracted more deposits than they could possibly invest in their credit societies. Funds let loose from a depressed competitive world have come into the co-operative sphere for profitable investment, but here too the depression has contracted the normal borrowing capacity of the members, hence the Co-operative Banks are faced with the problem of finding an outlet for their surplus funds or refusing to accept them and thus discouraging thrift. These surplus funds can be utilised for giving the much need financial assistance to the grower during the cultivation season. Already Central Banks in Madras and Bombay are giving loans to sale societies for short periods at low rates of interest. In the United Provinces the Moradabad Bank has inaugurated the experiment of realising repayments in grain and although it incurred some losses in 1932 and 1933, it has recently made some profits. In Burma, credit and banking have been combined in the same society and a loan is now given out on condition that the payment of both principal and interest must be made only in kind immediately after harvest. The society will sell the grain and credit the proceeds to the account of the member and return to him the surplus, if any. The refusal in the past to give any advance except on the pledge of produce has stood in the

way of the expansion of sale societies. It is desirable, however, for the sale societies to go further than give advances to members for their expenses of cultivation or for marketing their produce, These societies should take an active interest in the improvement of the methods of cultivation, in the introduction of better varieties of crops, and in the grading and pooling of produce. The Koppal Cotton Sale Society in the Nizam's Dominations has specialised in the introduction of the Jaiwant variety of cotton and it has made great progress within a short period, having secured for its members Rs. 10 to Rs. 15 per Nag (of 168 seers) more than the local variety called Jawari. "There is plenty of work to be done in the multiplication and distribution of better seeds, in the purchase and use of manures, in the scrutiny of the utilisation of loans by members for the above and other purposes, in the watching of the growth of crops and the prevention and cure of pests and above all, in securing proper deliveries of surplus crops. The Sale Society ought to do this if it is to survive the competition of middlemen; as a public institution, it is bound to guard against risks; as a cooperative society, it should be more interested in the welfare of individual members".*

The future lines of development of Cooperative Marketing in India may well be indicated in the words of Mr. A. P. McDougall—"Cooperative marketing is not worth doing if existing methods cannot be improved on. If it is to be of any real assistance to producers in India then the whole problem must be tackled on entirely different lines. The Cooperative movement throughout India has no clear line of advance. It is uncertain as to its future procedure with regard to marketing because it has no clear understanding of the goal to be aimed at; there is only one—clearing the lines of surplus goods"**

The promotion of direct relations between the producers and consumers in India may seem a far cry yet but a start

*Marketing Credit—K. C. Ramakrishnan—Indian Cooperative Review, 1936, p. 473.

**Report of Central Bank Enquiry Commission, p. 725.

may be said to have been made by the organisation of sugarcane growers' societies. In Europe the development of direct trading has been retarded by the divergent political tendencies of the producers' and consumers' organisations, the latter being usually dominated by the Left parties while the former are supporters of the agrarian parties holding opposite views. "These political considerations tend to slow down enthusiasm for direct relations and to introduce different interpretations of cooperative principles".* In some countries however direct relations have been developed in villages or in small towns e. g., in France rural bakeries receive the wheat of their members and return the loaves for their consumption. In the post war period cooperative dairies in Czechoslovakia attained a large measure of success by supplying direct to the consumers' societies and this led to the conclusion of an agreement between the Cooperative Wholesale Society of Czechoslovakia and the producers' organisations.

In international trade in food stuffs in particular great progress has been made in establishing direct relations by national federations of societies. The English Cooperative Wholesale Society has played a leading part in this enterprise and today as much as 8 per cent. of its imports are from overseas cooperative organisations. It was due to its initiative that the producers' organisations in New Zealand were organised and the New Zealand Producers' Cooperative Marketing Association Ltd. was formed the net sales of which rose from £1,108,000 in 1924 to £1,973,000 in 1929. Denmark has arranged for the marketing of her bacon and butter in England on these lines. Soviet Russia has gone a step further by planning production for community consumption. There production is being regulated according to consumption and all barriers between these two have been broken down. "Soviet trade" said Stalin, "is trade without capitalists, great or small, trade without speculators, great or small", hence the trade is not restricted to the state trading system alone by which the producers' organisations are brought in direct touch with the consumers stores but the local industries,

*World Agriculture; an International Survey, p. 293.

the collective farms and even the individual peasants have been drawn into this business and profiteering in any form is resolutely resisted.

In India the consumers' societies have not been well developed and organisations of the size and importance of the Triplicane Urban Stores of Madras are very few, hence the development of direct trading will have to wait till the consumers' societies, particularly in the important cities, grow up. Attempts have however been made in some places to link up producers and consumers if not as members of two separate organisations but under the same organisation. The Calcutta Milk Union is an organisation "which links together producer and consumer—so often set against one another in sharp conflict—in a harmonious relationship calculated to promote the interests of both"* The unit of this organisation is the rural milk society of the limited liability type, which usually covers the while village. The Union arranges for the delivery and transport to Calcutta by rail or motor of the milk supplied by the societies." The Union has devised very careful measures to ensure the purity of milk supplied to its customers. The milk of rural societies is transported by rail from collecting centres in heavily tinned sterilised milk churns. On its arrival at the dairy factory, every churn is checked for cleanliness, tested for specific gravity, fat and acidity. The milk after being filtered and weighed in the weighing scales, passes through a channel into the pasteurising coil vat where it is heated to 145' F. and held at that temperature for 32 minutes, thereby destroying injurious micro-organisms in the milk. It is then pumped on to the top of the "cooler" and is cooled down to 40' F. From there the milk is taken into a tank which fills bottles in the automatic bottle-filling discing and carping machine"* The milk is supplied to registered individual customers, hotels, hostels and hospitals and is also sold through a number of depots and distributing centres located all over the city. In 1935 the primary milk societies supplied to the Union milk valued at Rs. 1,49,928 as against Rs. 1,69,000 in the previous year and this decline was mainly due to the prevailing economic depression.

*Cooperative Milk Societies in Bengal by H. K. Sanyal in Cooperation in India page 178—9.

CHAPTER XIV.

STATE & MARKETING

The unprecedented nature of the economic depression in recent years has accentuated the hardship of the agriculturist in all countries and the State had to intervene in various ways with a view to alleviate distress and to give the much needed support to agriculture. The transition from the laissez faire policy of a century ago to active participation in trade is indeed striking and the degree of state intervention has varied in different countries according to the financial position of the Government concerned and the place of its agricultural commodities in its foreign trade.

The disparity which had set in between the cost of production and agricultural prices during the post war period had already made the lot of the agriculturist hard when the catastrophic fall in prices caused by the present depression made all hopes of recovery without any extraneous aid, well nigh impossible. "Thus in Switzerland, in 1928, the index number of prices of farm products (1914=100) was 151; that of cost of production 172. In Holland, in June 1929, the indices (1910-1911 to 1913-14=100) were: agricultural products 129; wages 204; all costs 163. In Sweden, in 1927-28 the index numbers (1909-13=100) were 143 for agricultural products, 186 for wages and 152 for commodities brought by the farmers. In Germany in 1928-29 all farm costs stood at 190·5 per cent. of the pre-war figure, while agricultural products reached only 132 per cent." Thus no wonder that by 1930-31 average prices were distinctly lower than the cost of production in most of the countries as the following figures will indicate.

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*The Agricultural Situation in 1929-30, p. 15.

*The Agricultural Situation in 1932-33, p. 35.

Table indicating the extent of the fall of prices below cost of production.

Per Kilogramme	Wheat	Potatoes	Butter	Milk
Switzerland ..	0·04 fr	0·01 fr	0·43 fr	0·02 fr
Sweeden ..	0·04 Kronor	0·01 Kr	0·01 Kr	0·04 Kr
Finland ..	0·06 Mark	x	0·60	0·03
Denmark ..	0·02 Kr	0·01	0·36	0·02

It was but natural that in view of this disparity and the consequent increase in the burden of agricultural indebtedness, State action should primarily be directed towards a solution of the price problem. It was realised that just as industrial labour was entitled to minimum wage, the agriculturist had a right to demand a minimum price for his produce and many countries went beyond this in trying to secure for him higher prices by various devices varying from the raising of tariff walls to direct participation in the trade and even to the extent of the destrucion of produce with a view to the reduction of stock.

Among the methods by which the State helped the agriculturist may be mentioned (1) Tariff protection (2) Financial aid to Joinstock companies for effecting the purchase and sale of the produce (3) Valorisation (4) Centralisation and regulation of exports (5) Supporting a high inland price by the State monopoly of sale (6) International agreement and bilateral and multilateral treaties.

Effective barriers have been set up against the free importation of produce not only by the imposition of import duties but also by the fixation of import quotas and licensing systems. In 1931 Czechoslovakia formed an Interministerial Committee with a view to regulate the imports of wheat and flour so as to protect the interests of the home growers. This Committee was later on replaced by the Czechoslovak Grain Syndicate in 1932 which lays down monthly not only the quantity to be imported and the rate of import duty to be levied but also the countries where from they are to be purchased. Belgium, in addition to the raising of import duties

to high levels, e. g., duty on butter at 140 fr per 100 kilogramme and on potatoes in bulk at 9 fr per Kilogramme, has prescribed drastic rules regulating the import of seeds and fertilisers primarily with a view to check fraud but ultimately to restrict their imports. Veterinary regulations have also been stiffened in many countries and this has resulted in a contraction in the imports of livestock. In 1929 Germany started with the enforcement of a compulsory milling quota and followed it with the inauguration of an elaborate system of import licenses.

The Federal Farm Board was constituted in the U. S. A. under the Agricultural Marketing Act to promote orderly marketing, minimise speculation and stabilise the movement of prices. The National Grain Corporation organised by the Board acted as the selling agency of the principal co-operative associations. Its policy of stabilising prices by lending to the co-operative organisations on the security of produce tendered proved ineffective and in 1930 it was reorganised as the Grain Stabilisation Corporation and although it was able to secure the control of 50 per cent. of the Wheat supply of the U. S. A. its efforts at the stimulation of prices proved a failure. The attempt of the Farm Board to stabilise cotton prices by offering a loan at the rate of 16 cents per lbs. to members of co-operative associations on the condition that they would market the produce through these associations, also proved a failure and as the stocks mounted up, the Corporation was winded up. "The total loss of the United States Government on all Federal Board marketing and stabilisation schemes are estimated by Mr. Morgenthan, Chairman of the Board, at about 350 dollars."*

In Germany an effort was made to regulate the marketing of rye with a view to stimulate prices and effect its better distribution within the country. The German Corn Trading Company started the purchase of rye in the autumn of 1929 and it was financed by the State aided Corn Industry and

*Results of State Trading (International Co-operative Alliance), 1933, page 83.

Trading Company. Rye was purchased at current market rates and resold in an "eosined" form which has made it unfit for human consumption. Although it succeeded in maintaining prices at a level of 160—170 marks per ton, it was soon burdened with a heavy stock and had to incur a loss of £3 millions.

Price stimulation by the restriction of production has been attempted with varying success in different countries. Restriction proves a different undertaking where the crop is not localised but is grown over a wide area by a large number of growers. France in January 1933 decided to build up a safety stock of wheat not exceeding 5 million quintals. The Government laid down a minimum price for wheat having a specific weight of 76 kilogrammes. All over the country, Committees for the organisation and regulation of the production and marketing of wheat have been set up and all cultivators have to submit statements showing the acreage under wheat with a view to enable the Government to have a correct estimate of the position to fix the import duties, to determine the minimum price and also to settle the rate of extraction of flour by the millers. These measures have given the Government ample opportunity to control the wheat market and to stabilise prices.

Coffee is a perennial plant and although its cultivation is more or less localised, its supply cannot be controlled at the source by regulating the addition of a year to the acreage already under it. Its demand for it however is also inelastic and a bumper harvest is likely to lead to over stocking and a slump in prices. The Coffee Valorisation Scheme aims at the creation of an artificial equilibrium between demand and supply and carrying over the surplus crops of one good year to the years following. The first Valorisation scheme to be inaugurated on a large scale was in 1905 when a catastrophic fall in Coffee prices had taken place. In recent years the Institute for the Permanent Defence of Coffee has regulated the distribution of Coffee by withdrawing it from the local market and storing the same in Government warehouses with the financial assistance from foreign Banks. It

also determines the quantity to be shipped from the different ports. It is true that by the imposition of artificial restrictions on shipments an encouragement is given to the extension of acreage in other countries, yet it gives the Brazilian Coffee planter immunity from exploitation of foreign speculators and it has resulted in the maintenance of prices at a fairly high level in recent years. In 1931 the Government decided to increase the export tax from 10s. gold per bag of 60 kilogrammes by 50 per cent. and to eliminate 12 million bags per year. The National Coffee Council which has replaced the Institute was empowered to use the fund raised out of the Export Tax for the destruction of stock and for the improvement in the quality of production and increase in consumption by propaganda. Arrangements were made with the British Coffee Corporation for extending the market in England for Brazilian Coffee and also for assistance in marketing there. By March 1933 about 950,000 tons of coffee were destroyed and with a view to restrict the acreage the Government issued in November 1932 a Decree prohibiting the planting of coffee anywhere within the country.

Cuba affords another instance of an attempt at the stabilisation of prices by crop restriction and regulaion of exports. In 1925 the price of Cuban Sugar dropped to 2 cents and it showed a tendency of falling further next year when the new harvest was reaped. On the petition of the sugar planters, the Government introduced a compulsory 10 per cent. reduction of the crop estimated at 5 million tons and imposed a production tax of 5 dollars for each bag of sugar in excess of the allotted quota. In 1926 the crop was further reduced to 4.5 million tons and with a synchronisation of bad harvests in Java and Europe it was expected that prices would rise turned out otherwise as the world's consumption had con- and crop restriction in Cuba would be effective. Things tracted and price fell to 3 cents. It was decided to support the restriction programme by controlling the exports. In 1927-28 a Sugar Defence Commission was set up which was not only empowered to determine the size of the crop to be raised but also to control the distribution to foreign coun-

tries. Alhough the Commission made a further reduction in the crop, the prices in the New York market continued to decline owing to the import of duty free sugar and the reaction of the New York prices on the European markets made the efforts of the Commission to push on exports futile. Acreage restriction was abandoned and prices fell to 1,75 cents in 1929 when a Co-operative Exporting Agency was entrusted with the monopoly of marketing the crop. The immediate effect of this single seller system was of course a rise in prices which reached the 2.5 cent level but the lack of business knowledge of those in the management of this Agency coupled with a marked contraction in consumption due to the world depression have resulted in a heavy accumulation of stocks and a decline in prices to 1.25 cents. Another factor which stood in the way of the efforts of Cuba to stabilise prices by singlehanded restriction of the crop was the growing tendency in all the principal consuming countries to develop their own resources with a view to attain self-sufficiency. Many European countries have organised their sugar factories in cartels which fix production quotas and selling prices. In 1931 the inability of a single country like Cuba or Java to influence prices or to reduce heavy stocks was recognised and an effort was made by international action to regulate the marketing of sugar. In January of that year the Chadbourne Restriction System was agreed to by Cuba, Germany, Poland, Belgium and Czechoslovakia under which every country was to export upto the alloted quota which was to be determined on her present productive capacity and average exports in the past. Although this scheme met with success in 1931 it could not prevent a fall in prices in the next year,, caused by a heavy increase in production in non-contracting countries.

The control of exports by state agency has been adopted by many countries in recent years with a view to push up prices, regulate production and improve the quality of the produce. Argentina has set up the Grain Regulation Board which fixes the basic prices of wheat, maize and linseed at which it will buy them from farmers for sale to exporters,

Without the adoption of the familiar programme of quotas and crop restrictions, Yugoslavia has achieved some success in the improvement of her marketing organisation by introducing the State regulation of exports. In 1929 the Government organised the Privileged Company for Export with the Agricultural Co-operative Societies, the exporting firms and the state as the shareholders and the Company was given a large credit by the Government and the National Bank. It undertook directly on behalf of its constituents to market their produce and to promote better grading and standardisation. Trading in small quantities at home was left with private traders. This Company has succeeded in raising prices at home, e. g., in August 1931, the farmers received 160 dinars per 100 kilogramms, at that time about three times higher than the world price. This high price could only be paid to the home producer by raising the price of wheat inside the country so that the home consumer paid 240 dinars per 100 killogramms. "It is true that up to 30th June 1933 the control of wheat exports had cost the state about 344 million dinars but it meant also higher prices for the farmers and the sale of 4,623,000 quintals of the wheat grown by them."*

Without taking up the work of exporting in the hands of the State directly, many countries have adopted various measures to encourage exports. Italy has a surplus of about one third of her rice produce but it is difficult to find for it a place in the foreign market due to the keen competition of better situated countries. To encourage exports, the National Rice Institute was started in October 1931 and "it was authorised to raise a fixed levy on every quintal of rice marketed, thus forming a fund out of which exporters are to be compensated for the difference between the prices of home-grown rice and the prices of foreign rice."** All rice growers have to furnish from time to time information about the acreage under rice and the quantity actually harvested and these statements are checked by local Committees. The Institute prepares an annual estimate of the total acreage and the aver-

*Results of State Trading.

*Agricultural Situation 1932-33, p. 235.

age yield per acre. On every sale, the purchaser has to pay an "agreement fee" which is fixed from time to time by the Institute and the funds so raised are used to recompense any loss caused by exports. "While the prices of the foreign rice in 1931-32 fell considerably, the price of Italian rice rose from 62.25 liras in 1930-31 to 67.75 liras in 1931-32. The first year's working of the Institute resulted in increasing the returns to Italian agriculture by more than 50 million liras in comparisan with the previous year."*

In Japan, the State has played an important part in the development of her export trade by securing the coordination of the firms engaged in the export trade. The organisations started under the Export Guild Law perform the following functions: "fixing export quantities or prices according to markets; inspection of export shipment and enforcement of a fair standard of quality; maintainence of the agents abroad; investigation of new markets; advising inexperienced exporters; elimination of middlemen causing a reduction of sales prices; negotiating sales for the members and direct selling to these organisations and guaranteeing loans obtained by them from the Cooperative Banks.

In 1931—32 Australia assisted the wheat exporters by introducing a system of marketing bounties. The Government decided to incur an expenditure of £3 millions on the payment of a premium at the rate of 6d. per bushel on all wheat exported or used for local consumption so long as the market price remained below 3s. There developed a bitter controversy about the machinery for the distribution of this bounty and ultimately the proposal had to be modified and a bounty was sanctioned on a flat rate of 4½d. per bushel on wheat without any references to the prices prevailing. Although the immediate object was realised, this scheme led to a great extension of the wheat acreage in the following year and there was much discontent when the Government declined to renew the Marketing Bounty.

Early in 1936 the Ceylon Government inaugurated a scheme for securing to the cocoanut grower adequate prices

*"Made in Japan" by G. Stein, p. 133.

and an extensive market. The area under cocoanut in Ceylon is more than the area under tea and rubber put together. A cocoanut board has been established which is in charge of the Central Sales Room. No copra or cocoanut oil can be exported out of the country except upon production of an export license issued by the board and this license will not be issued unless the commodity is brought into the Sales Room and satisfies certain requirements as to standard, quality etc. This Sales Room will enable the producer to deal with the consumer or his dealer direct. The board will also open a register of approved buyers and brokers who collect copra from the producers in the villages and bring samples to Colombo on which bids are made. The Board will arrange for the broadcasting from Colombo of market quotations and these will be displayed at village post offices. Besides these the Board has also inaugurated a "Use more cocoanut" campaign and has allotted funds to give an impetus to those industries in which cocoanut is used as raw material e. g., liquor and fibre industries.

A State monopoly of imports is no doubt a protective measure but it does not cause the same amount of hardship to the consumer as would be done by an import duty. Under this scheme, the State purchases the entirely homegrown crop at a price usually higher than the world price and also imports the required quantity of produce at market price and sells to the home millers at a price somewhere between these two prices. The loss on the purchases of homegrown produce is made up by the gain on imports, provided the country normally has to depend on foreign produce for a large proportion of its requirments. The consumer no doubt has to pay higher prices, but the burden would be even higher with a high import tariff. Switzerland grows about one-fourth of her requirement of wheat and has to depend on foreign sources for the balance. She adopted a rigid monopoly of wheat imports in 1922 with great success and secured for the farmer a price about 8 francs per 100 kg. of wheat higher than the world prices, but it proved unpopular as the entire burden of the higher price fell on the consumer of wheat bread and not on the whole population, hence the sys-

tem has been modified. The Government buys homegrown wheat at 8 francs per 100 kg. higher than the world price. Although the Government continues to import wheat to maintain a national stock, imports on private account are permitted but millers are compelled to purchase homegrown wheat in a fixed proportion and milling premiums are granted to encourage them.

With almost a similar degree of dependence on foreign imports as Switzerland, Norway has adopted an improved system of monopoly of imports. The monopoly is under the control of a small committee representative of all interests concerned. It purchases homegrown wheat at 4 shillings per 100 kg. higher than the price at the ports and it is sold to the mills after being cleaned and graded. The mills can buy imported wheat at a fixed price and the percentage of admixture with homegrown wheat is also fixed from time to time. Imported flour and home made flour have to be sold at prices which are uniform throughout the country, hence the incentive to increase the imports is not strong.

Importation certificates failed to stabilise prices in Czechoslovakia and more effective measures were called for. In 1931 an Inter-Ministerial Committee was formed to take up the control of the imports of wheat. It laid down every month the limit of imports and brought up prices of imported wheat to the same level as homegrown wheat by levying import duties. In 1932 this Committee was replaced by the Grain Syndicate which worked under the direct supervision of the Commissioners appointed by the Government and in the determination of import quotas and prices attempt is made to safeguard the interests of both the consumers and the farmers,, "It has succeeded in having a systematic procedure followed in order to regulate the imports of cereals and milling products, its work in relation to the formation of prices has affected chiefly those cereals and their products of which the home production had hitherto been, at times, insufficient, that is, wheat, flour and maize. It is owing to the Syndicate that the prices of wheat and of maize were

maintained upto the time of the harvests of 1933 at a level which underwent comparatively slight changes."*

Reference has already been to the part played by the Farm Boards in the U. S. A. in connection with marketing. The Emergency Agricultural Adjustment Act of 1933 was more thorough-going and aimed at the control of production, obtaining higher prices for producers, orderly marketing and sale of surplus crops. The Restriction Schemes introduced under the act provided for compensation and while securing minimum prices to producers efforts were made to improve standard of quality. The agreements under the act enabled the Government to penalise recalcitrants so as to give it a complete hold on the market. In cotton, when the grower agreed to reduce his acreage by 30 per cent., "he was given an option to purchase an amount of cotton not exceeding the amount by which his production was reduced. The producer was to have the option to buy such cotton at the average price paid by the Secretary for cotton procured as above described. He could exercise his option at any time upto 1st January, 1934 by paying the option price and all actual carrying charges, or the Secretary might sell such cotton on the account of the producer, paying him the excess of the market price at the date of the sale over the average price above referred to after deducting carrying charges. In no case, however, was the producer to be held liable for financial loss incurred in the holding of such cotton. "In the case of wheat, on the grower undertaking to reduce his acreage by 20 per cent. or less below the 1930-32 average he was assured the "parity price" on wheat on the quantity which may be considered to have been consumed as human food. The "parity price" was based on the purchasing power of one bushel of wheat in the prewar period. Besides this, he was given a bounty of 28 cents. per bushel on the average production of the 1930-32 period. Vigorous steps were taken to divert the surplus crop from the domestic to the export market. A contract was made with China under which the Reconstruction Finance Corporation was to

*Agricultural Situation, 1932-33, p. 163.

lend funds to the Chinese Government so as to enable them to purchase 10 million dollars worth of wheat and flour from the North Pacific Emergency Export Association. "Between 19th October and 1st December, 1933 the Association purchased 7,753,000 bushels of domestic wheat and sold 7,228,000 bushels for export. It first purchased wheat at 67 cents. per bushel and on the 29th November at 74½ cents. whereas export prices ranged from 50.1 to 59.5 cents."

Many of the attempts to stabilise prices described above have not only involved a large measure of official compulsion but have caused a great strain on State finances and the very success of a programme of crop restriction has caused an extension of the acreage as a result of the rise in prices. The British Wheat Act of 1932 on the other hand, gives just the necessary stimulus to the trade at the minimum cost. Under this Act the standard price is fixed for wheat and the farmers are allowed to sell in the open market and at the end of the year, he is paid the "Deficiency payment" or a sum equal to the difference between the standard and average prices of wheat sold by him. With a view to prevent any increase in the acreage it has been provided that this deficiency payment is liable to reduction if the acreage unduly expends. The funds are raised out of the "Quota payments" realised from the millers and importers on all flour milled or imported flour. Provision has also been made for the purchase by the Flour Millers' Corporation, in cases of large accumulation of stocks, of home grown wheat upto 12 per cent. of the annual production.

A remarkable feature of the Agricultural Marketing Acts of England is that the initiative in marketing control must come from the growers and they are consulted at every stage of the preparation of the scheme. This Act not only helps the growers to secure better prices but looks to the interests of the consumer as well. The Marketing Act of 1933 promotes the better marketing of a manufactured product by the joint action of the marketing boards started for the marketing of the manufactured product and also of the primary agricultural product which is used in manufacture

The postwar period was marked by a world wide development of the economic nationalism which brought in its train all artificial barriers to the free flow of trade. In their attempt to give relief to the agriculturist and to support prices at a high level various methods as described above, were adopted. The immediate results of some of them, e. g., the activities of the Federal Farm Board or the system of milling quotas and import licenses adopted by Germany, were no doubt quite satisfactory but ultimately they proved extremely costly and increase in acreage very often followed. Instead of this, "if state intervention had been directed rather to giving the producer a better price by reducing the margin between wholesale and retail prices and had created market organisations with this end of view, instead of attempting to raise prices by accumulating stocks, the producer and the community would have been better served." It was but natural that the catastrophic fall in prices would focus the attention of all countries to a solution of this aspect of the problem to the neglect of all others and it was believed that with a protective tariff, restriction of production or improved marketing methods; prices in the national market could be supported at a high level. The actual results were however otherwise. In 1932 Germany adopted a series of measures with a view to stimulate internal prices. All efforts were concentrated on the shutting out of the imports by increases in the import duty on cereals and by raising the percentage of compulsory admixture of homegrown wheat to 97 and it must be acknowledged that the net imports of breadgrains fell from 6,819,000 tons in 1926 to 866,000 tons in 1932-33 yet the fall in the prices of cereals continued mainly due to a large increase in the acreage within the country. This made Germany to a great extent self sufficient so far as her cereal requirements were concerned but it did not improve the economic condition of her agricultural classes. On the other hand, the state of things showed a market tendency to improve when the balance in the agricultural economy was restored by giving the much needed impetus to animal husbandry. Thus we see that the national isolation which is the result of setting up barriers to trade has in it seeds of

destruction and "it cannot said that the policy of autonomous price formation has generally succeeded in solving the agricultural price problem on the markets in which it has been applied".*

It is a welcome sign that in recent years, a more comprehensive view has been taken of this problem. As George Pavlosky has remarked, "the agricultural year 1932-33 has been particularly remarkable for this tendency towards deliberate co-ordination and planning of production and marketing, which linked the agricultural development of the period under review of the general trend towards planned economy."** Price stabilisation is therefore tackled not as an isolated phenomenon but as one aspect of the general problem of economic rconstruction which can only be solved by the rationalisation of the farming organisation. Hungary has not only entered into agreement with France, and Yugoslovia to secure a reciprocal perferential tariff but has brought about a large reduction in the railway freight and transport charges. She has started a clearing Bureau for agricultural products and for foreign trade. Ample protection has been given to the indebted farmers so that they may not be easily dispossessed of their land and steps have been adopted to improve the methods of farming and to raise the standard of quality. The Italian wheat programme indicates not only the measures to limit the area and to improve the yield by the use of selected varieties but compulsory milling percentages have been fixed, and the marketing of wheat is so regulated as to build up a collective stock of wheat within the country and arrange for the export of the surplus. Liberal subsidies have been given for the construction and equipment of elevators and grain warehouses.

It cannot be denied that economic planning can produce the best results if it is supported by international action and this aspect of the problem is receiving greater attention in recent years. The Lausanne Conference in 1932 realised that

*Results of State Trading, p. 87.

**Agricultural Situation, 1932-33, p. 38.

no solution of the Reparations problem could be made without adopting "measures to revive the activity of trade, both among those countries themselves and between them and other States and to overcome the difficulties caused by the agricultural countries of Central and Eastern Europe by the low prices of cereals." This marks the beginning of a series of attempts to arrive at a solution of the problem of national economic degeneration by international action. It is true that many of these attempts did not produce tangible results, yet the Ouchy Convention and the Economic and Agricultural Commission of the Stressa Conference impressed on the world the need of concerted action. Although the World Economic Conference proved abortive, the net result of this effort was the London Wheat Agreement in 1933 in which all the principal wheat growing countries of the world took part. "This agreement provides for a reduction of exports of wheat by the exporting countries, applying to the crop years 1933-34 and 1934-35 while the importing countries agreed not to encourage the extension of their own wheat growing, to do everything in their power to increase the consumption of wheat and when the prices of wheat have reached and maintained for a specific period a certain definite level considered as sufficient, to begin the lowering of tariffs and the removal of quantitative restrictions on wheat imports".*

Besides these, bilateral trade agreements have been concluded between different countries incorporating reciprocal concessions in tariff or exchanges of definite quantities of produce at favoured rates, e. g. the trade agreements between Germany and Rumania for a reduction of duties on imports of Rumanian barley and maize. The Anglo-Danish Agreement of 1933 provided for reciprocal reductions in the tariff of certain commodities and for a guarantee by Denmark of the 80 per cent. of her coal requirements from England. The Anglo-Argentina agreement of 1933 gave mutual facilities to the export of British coal to Argentina and the export of Argentinian frozen meat to England. The Indo-Japanese agreement laid the basis for the exchange of Indian

*Agricultural Situation 1932-33, p. 50.

raw cotton with Japanese cotton cloth. Although these have proved successful in many cases in giving temporary relief "in the present stage of the evolution of planned national economics these beginings of economic re-organisation of the world through bilateral agreements between countries complementary to each other, must not be given exaggerated importance."*

After this survey of State aid to marketing in the foreign countries, when we turn to India, we find that till very recent times practically nothing was done by the Government in India in this direction. The problem of agricultural development and the amelioration of the condition of the peasantry has no doubt arrested the attention of the Government from the eighties of the last century but it has been tackled from the point of view of agrarian reform, relief of rural indebtedness and the introduction of better methods of farming, while the sole assistance given to marketing was by the improvement in the means of communications. In the present century while the Government failed to introduce an uniform system of weights and measures in India, a beginning was made to improve the quality of raw cotton by the Bombay Ginning and Pressing Acts and a serious attempt was made to develop regulated markets in the Central Provinces and Bombay. Although our total exports represent only 9 per cent. of the total production the conditions under which internal marketing was carried on remained chaotic and in the world's markets Indian produce received low prices due to its low reputation. It was left to the Royal Commission on Agriculture to point out that—"the incentive to grow improved varieties introduced by the agricultural departments is pro tanto diminished if the cultivator fails to obtain the full premium justified by their superiority over those ordinarily grown. Again, he has little incentive to market his produce in the best possible condition unless that condition is recognised in the price he gets for it."** Non-official opinion in the country pressed for State aid to marketing. The

*Agriculture Situation, 1932-33, p. 53.

**Report of Royal Commission on Agriculture, para, 398.

Indian Economic Conference at its Mysore Session in 1929, discussed this problem at length and the present writer among others, tried to impress on the public the immediate necessity of State action with a view to promote orderly marketing. The All-India Provincial Co-operative Institutes Association also formed Committees to prepare schemes for the inauguration of Cooperative Rice and Wheat Pools. The Central Banking Enquiry Committee in 1931 again went into this question from a different point of view and recommended, among others, that Provincial Marketing Boards should be established and their activities should be co-ordinated by the Imperial Council of Agricultural Research. The construction of warehouses by private agencies should be encouraged and railway receipts should be made negotiable. Suggestions were also made for the provision of better banking facilities with a view to place the exporter in an advantageous position. The first definite indication we had that the Government had abandoned their policy of non-interference in agricultural marketing, was by the appointment of Mr. A. D. Livingstone who is one of the leading experts in the U. K. as the Marketing Adviser to the Government in 1934. The Provincial Economic Conference in April 1934 suggested that an intensive programme to develop marketing facilities for agricultural products should be taken up and this should include propaganda and dissemination of information about the quality and grades of Indian produce in foreign markets, its grading, sorting and bulking, regulation of production on the basis of demand, establishment of regulated markets and the introduction of a system of licenced warehouses. As a result of this a Central Marketing Board has been organised and a large staff of Marketing Officers appointed both in the centre and Provinces. At present the work is being carried on, three lines:—(*a*) investigation into the conditions under which the principal commodities like the cereals, oilseeds, tobacco, fibres, fruits and animal husbandry products are at present being marketed; (*b*) Development work, including demonstrations of any improvements suggested as the result of the marketing studies; (*c*) Assistance giving to the establishment of grades and standards.

Among the more direct measures undertaken by the Government which may be said to give some relief to the Indian farmer are the wheat import duty, the protective duty on sugar and broken rice and the cotton tariff. The wheat duty was required to give some protection to the Indian grower against the competition of Australia. In 1929-30 the acreage under wheat expanded in India to 10½ million acres and the consumption at home averaged 8½ million tons. This along with the sudden increase in the exports Russian wheat forced prices down and necessitated the imposition of the import duty in 1931 which has further been extended up to 1935 but it was reduced in 1936 to Rs. 1 per cwt. With an increase in imports of low grade rice from Siam and Indo-China in recent years which rose from 8,500 tons in 1933 to 58,000 in 1934 it has been considered necessary to protect paddy cultivation in Southern India by the imposition of an import duty on broken rice. The protection given to the sugar industry on the recommendation of the Tariff Board has brought about a reduction in the imports of Java sugar and a large expansion in the acreage. The manufacture of Gur has also increased from 27,72,000 tons in 1931 to 37,00,000 in 1934. It was however realised that the era of prosperity which had set in was not been shared in due proportions by the industrial interests and the disorganised growers of sugarcane. With a view to protect the latter and ensure to them a fair return the Sugarcane Act was passed in 1934. Under this Act, the Local Government was empowered to fix from time to time a minimum price for the purchase of cane by the factories in any notified area. Local Cane Committees have been formed to look after the interests of the growers and special officers have been appointed to organise Cooperative Societies for cane-growers with a view to increase their bargaining power.

As a result of protection to the Cotton industry not only have the spindles increased from 66 lakhs to 96 lakhs and looms from 94,000 to 1,95,000 between 1913 and 1934 but the consumption of Indian raw cotton by the mills in India has gone up from 20,96,016 bales in 1913 to 27,03,990 in 1934. The Ottawa Pact, the Indo-Japanese Trade Pact and

the Bombay Lancashire agreement also illustrate the efforts which are being made under the leadership of the Government to promote the marketing of Indian produce. As a result of the activities of the Lancashire Indian Cotton Committee, England purchased twice as much Indian cotton in 1933-34 as she did in the previous year and while the total volume of Indian cotton consumed outside India has risen only by 25 per cent., in England the increase has been by 100 per cent. In the actual trade with Japan, India has sold raw cotton much above her quota than she has imported.

In course of a lecture on "Indo-Japanese Trade" in Calcutta, Mr. Kakitsubo, Vice-Consul for Japan pointed out that 60 per cent of the Japanese manufacture of cotton piecegoods is from Indian Cotton and he urged that "by limiting the import of Japanese cotton goods, India will be limiting her export of raw cotton to a large extent. Japan has been for many years the best customer for the Indian cotton growers. In the last 20 years the average annual purchase of Indian cotton by Japan was more than 1½ million bales, i.e. 40 per cent. of the total production of raw cotton in India. It may not be too much to say that the living and comfort of a large portion of the Indian peasants and Japanese indusrial population is dependent upon the future of the Indo-Japanese trade."

The Ottawa Trade Agreement based on a large measure of imperial preference was passed in 1931. Although the period of the working of the Trade Agreement covered abnormal times when among other factors was the reversion of some countries to the system of barter, there is no doubt that some of our agricultural commodities gained great advantage. Our export of linseed to the United Kingdom has increased to 3,79,000 tons in 1933-34, and 2,39,000 tons in 1934-35. The crop of 1935 amounting to 4,18,000 was the biggest linseed crop during the past decade and of this after internal consumption and exports only 7,000 tons were left. Our rice exports to the United Kingdom too showed a progressive tendency, the exports having risen from 23,000 tons in 1933 to 45,000 tons in 1935. The same increase is noticed in the

case of groundnuts. India exported 20 crores worth of tea to the United Kingdom which represented 55 per cent. of the total tea imports in the United Kingdom and over 90 per cent. of the total exports of tea from India.

The activities undertaken by the Government in recent years to restrict the cultivation of Jute marks another phase in the evolution of the scheme of State aid to marketing. Between 1928 and 1930 the Jute acreage in Bengal rose from 27,02,000 acres to 30,62,000 followed by a progressive accumulation of the stock and fall in prices.

In view of this state of things, "the problem of adjustment of supply to demand thus resolved itself into a question of curtailing the crop to such an extent that the redundant stocks would be brought down to their normal proportions and thus prevented from exercising any prejudical influence on the price of the fibre."* Although there was a strong demand for compulsory restriction the Bengal Government decided to carry on voluntary restriction of the acreage by one-third. A large staff of special officers were appointed to impress upon the farmers the great necessity for restriction. They interested the educated middle classes in this work and with the backing of the local officials, it was possible within a short period to approach hundreds of thousands of cultivators scattered over a wide area and win them over to the cause of restriction. An attempt was made simultaneously to introduce substitute and alternative crops for the land set free from Jute cultivation. The results were quite favourable, and prices showed a rise, helped also to some extent by bad weather conditions during the sowing season. The restriction scheme is being continued with unabated energy, but it is also realised that this alone will not afford a permanent solution of the problem of Jute marketing and Jute prices. Dr. S. G. Barker in a report submitted to the Indian Jute Mills Association recently has pointed out that

Address delivered by Mr. N. R. Sarkar on "The Problem of Jute at the Indian Institute of Economics on November 29, 1934."

competitive countries have adopted scientific methods of cultivation, extraction and control in manufacture. The advance of science in other industries both competitive and consuming will in future aggravate the Jute marketing problem. "Jute must also be able to do this by the establishment of an organisation to study ways and means of conferring upon either fibre or fabric characteristics which they do not possess in the ordinary natural condition. Agencies must be established for the intelligent anticipation of such modifications. A critical survey of present machinery and technique should be made of its flexibility both as regards production and product." Now that under the new Reformed Constitution, Bengal is likely to receive a larger share of the proceeds of the Jute Export Cess, it would be possible to utilise a portion of these funds to finance work of the type envisaged in the Barker Report.

The Government of India have in April 1936 taken steps to give effect to the recommendation of the Royal Commission on Agriculture about the formation of a Central Jute Committee which will be under the control of the Government of India and will undertake agricultural, technical and economic research. Its work will include improvement of crop forecasting and statistics, production, testing and distribution of improved seeds, inquiries relating to banking and transport facilities and improvement of marketing.

Success in price stabilisation can only be attained by a proper co-ordination of all the factors involved in marketing. Reduction in the acreage alone without the provision of the necessary marketing facilities to the cultivator or without the removal of some of his basic deficiencies in bargaining power may produce some temporary effect but will not have any permanence in it. With this object in view, Mr. A. P. McDougall submitted before the Central Banking Enquiry Committee his scheme of a Jute Corporation, which does not appear to have received sufficient attention. He suggested that the Corporation should be given powers to fix prices for the raw materials, to eliminate unnecessary costs of distribution and effect all round improvement, While the capital

would be contributed by the Provincial Governments concerned, in the Board of Directors all the interests involved should be given adequate representation. "Prices shall be fixed in advance in consultation with various interests involved. Manufactures and export balers shall be bound to purchase all their requirements through the Corporation at the stated price. The Corporation will be responsible for all surplus Jute and shall withhold same from the market unless for purpose which shall not be in competition with the manufactured jute fabric."* Co-operative societies of jute growers should be formed who would collect and despatch the produce to local depots from where it would be transported to the central depot where the final price payable to the grower would be settled. On delivery at the local Depot the grower would be paid an advance not exceeding 75 per cent. of the value. The Corporation would ascertain from the manufacturers their annual requirements at the beginning of the season and they would be under an obligation to buy the amount specified. It is however doubtful how far it may be possible to ascertain the requirements of manufacturers at home and in foreign countries and more so to hold them to their promises, but the scheme on the whole points to the need for a definite lead by the Government in this direction. A minimum price may be fixed for the jute at which the Corporation will buy from the growers the funds for which may be derived from the Jute Export Cess or may be raised as a loan on the security of the Cess revenue. After this the Corporation will utilise the existing channels of trade and stand as a dominating factor in competition.

The future of agricultural marketing in India will therefore involve a large measure of State intervention varying from tariff protection, bilateral treaties to the application of science to the productive and distributive process. The inauguration of regulated markets, licensed warehouses, standardisation of weights and measures, grades and standards would be as necessary as the provision of banking facilities

*Report of the Central Banking Enquiry Commission, p. 729.

for moving the wheels of trade and in some cases it might be necessary for the State to adopt some of those direct methods for controlling imports or developing the exports of agricultural produce which many countries in the West have done with success. It may, at times, be necessary to defend the home industries from the prohibitory action of other Governments which used to buy our commodities and for this, legislative retaliation coupled with scientific improvement may be necessary. India had a fairly extensive export trade with New Zealand in woolpacks made of Jute the exports in 1928 being valued at £147,906 and they declined in 1931 to £58,700 but gradually rose to £102,960 in 1933 but in May 1936 the New Zealand Government have prohibited the importation of woolpacks except with the special permission of the Minister of Industries and Commerce. This step has been taken to give assistance to the New Zealand Woolpacks and Textiles Limited who supplied 18 per cent of the Dominion requirements in 1935 and the production has since then been increased very much.

Glossary of Marketing Terms.

Ahata—Warehouse.

Alsi—Linseed.

Arit—Commission of the Artia.

Artia, Arhatiya, Arthi, Aratdar—Commission Agent.

Artia Kachcha—Agent who acts for the seller.

Artia Kachcha Pakka—Agent who acts for buyer or seller.

Asoj—Indian calendar month (Mid September to mid October).

Baisakh—Indian calendar month (mid April to mid May).

Bachat—Quantity rejected as of inferior quality.

Batta—Discount.

Bepari—Middleman.

Bhadon—Indian calendar month (mid July to mid August).

Bharole—Cylindrical bin with concave sides.

Bichak—Invoice.

Bikrami Calendar—Named after King Vikramaditya and commencing from 57 B. C.

Cashiery—Charge made on account of clerical service.

Chadai—Charge for placing grain on the scales.

Changar—Market porter.

Chaudhari—Headman or Overseer.

Chaukidar—Watchman.

Chhani—Charge for cleaning.

Chuhra—Sweeper.

Chungi—Grain paid to weighman in addition to customary dues; Octroi charges.

Dalal—Broker; middleman.

Dami—Market deduction paid from the buyer.

Dara—mixed lot.

Dhalak—Customary quantity of grain taken in excess.

Dhatta—Allowance for dryage in Jute.

Dharmam, Dharmao, Dharmday—Charity contribution.

Dharmkhanda—Standard scale.

Dharway—Village weighman,

Dheri—Charge for heaping the grain.

Dokra—Gunnybag into which unginned cotton is packed.

Doon—Wicker basket for measuring grain in Assam.

Faria—Middleman.

Gumasta Rasum—Payment for account keeping.

Hatta—Sale by secret bidding.

Hundekari—Transport agent for fruits in Bombay.

Jachnadar—Jute sorters.

Jalap—Advance against standing crops.

Kabari—Allowances realised from sellers of Jute.

Karda, Karta—Allowance for diet.

Kasar—Charge for money changing.

Kat—Discount on cash payment in the Punjab.

Kattai—Charge for opening gunny bags in the C. P.

Khandsali—Middleman in the *Gur* trade in U. P.

Kharif—Autumn harvest.

Khatti, Kotha—Storage chamber.

Khatik, Khatidar—Middleman in fruit marketing.

Kolagaram—Weighment free in Madras Presidency.

Kunjra, Bagwan—Middleman in the fruit trade.

Maghar—Indian calendar month (mid November to mid December).

Manda—Put option.

Manda Tezi—Combined put and call option.

Mukaddam—Transport agent in cotton in Bombay.

Muthi—Quantity of grain taken in excess at random in sales.

Ojan Sarkari—Weighment fee in Jute.

Paikar—Middleman.

Palledar—Market porter.

Palledari—Labourer's wages.

Parchhatti—Earthen vessel for grain storage.

Rabi—Spring harvest.

Rulai—Charge paid to the man who rolls grain with hand to clean the dust before it is placed on the scale for weighment.

Sokary—Earthen bin for storage of wheat in Attock District.

Safari—Charge for cleaning.

Sattapata—Bond.

Shagirdi—Fee for apprenticeship.

Sowcar, Mahajan—Moneylender.

Tabro—Charges for weighment in Sind Markets.

Taula—Weighman.

Tezi—Call option.

Tharagan—Commission agent in S. India.

Theka—Gunny bags for storage.

Tolai—Weighment fee.

Toria—Rapeseed.

Wadha—Premium.

Watta—Deduction for moisture, adulteration etc. in cotton sales.

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